

Driven by Curiosity &
Powered by Passion

Univaciti

2026 Student Brochure



Programmes & Specializations

2

Univaciti

TESA
Tech Skills Accelerator Programme. Intensive 8-week tech skills accelerator.

NEST
Tailored for rapid but flexible curriculum for employees in key tech skills.

STEM
Science, Tech, Engineering and Maths courses for young people.

CERTIFY®
Univaciti certification exams in key tech skills, for skills validation.



CONTENTS

By Programmes

TESA	5
-------------	----------

See the specialization in TESA. 8-week intensive Tech Skills Acceleration.

NEST	35
-------------	-----------

Flexible, tailored and customized Tech skills acquisition programme for companies' employees.

CERTIFY	61
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Univaciti certification exams in key tech skills, for skills validation.

STEM	71
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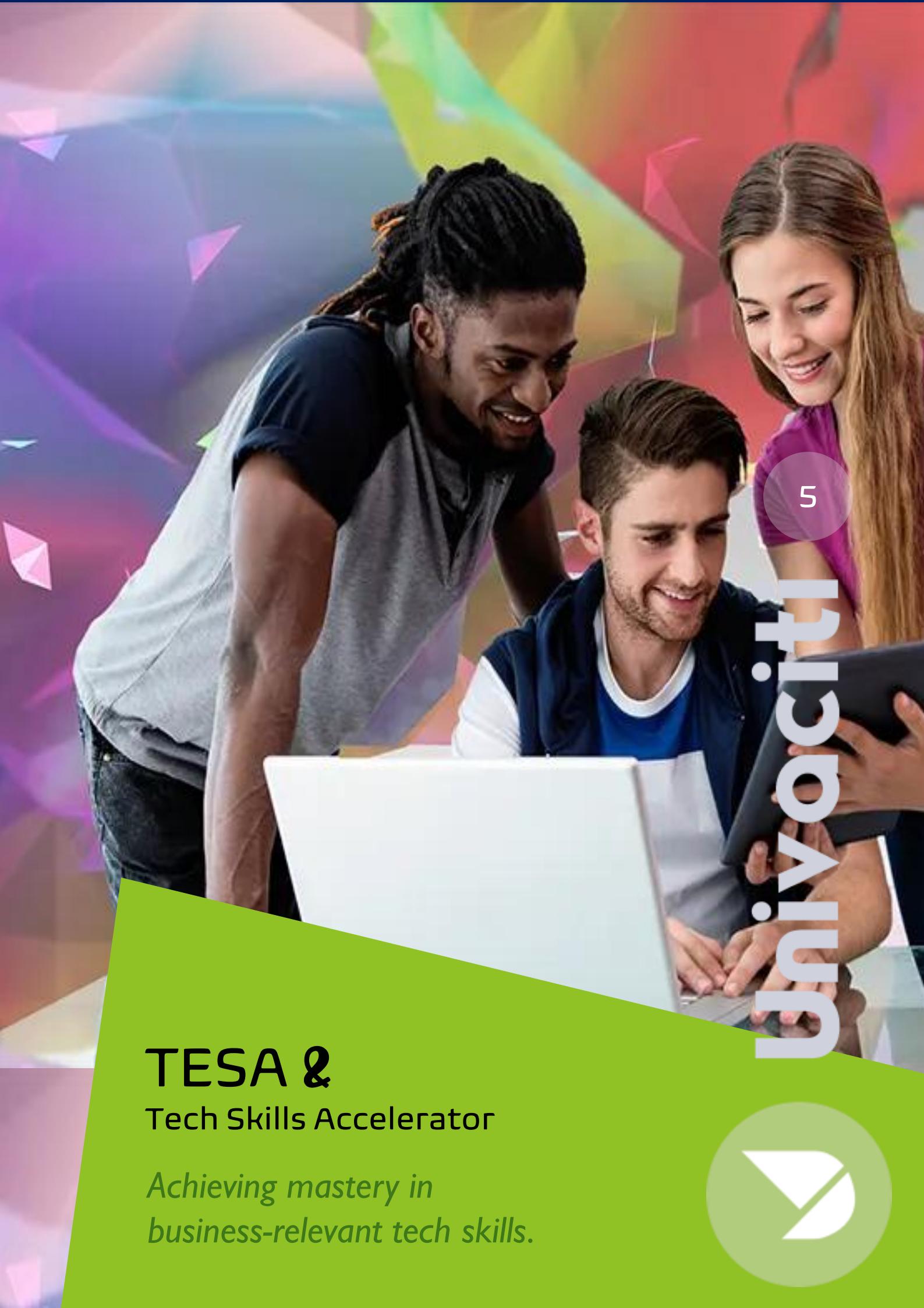
Science, Tech, Engineering and Maths courses for young people.



CONTENTS

By Specializations & Programmes

COURSES	TESA	NEST	STEM	CERTIFY
Cloud Engineering	7	37	73	63
Data Analytics	11	41	77	67
Software Eng. - Java	15	45	81	...
Quality Assurance	19	49	85	..
Software Eng. - React	23	53	89	..
Solutions Architecture	27	57	93	...
Artificial Intelligence	31	61	97	..
PROGRAMMES	5	35	71	61



5

univacit

TESA & Tech Skills Accelerator

*Achieving mastery in
business-relevant tech skills.*



Programmes & Specializations

TESA



TESA

Tech Skills Accelerator
Programme.

1 Cloud Engineering

2 Solution Architecture

3 Data Analysis & Analytics

4 Software Engineering - Java

5 Software Engineering - React

6 Artificial Intelligence & ML

7 Quality Assurance

What is TESA.

8-week intensive specialization courses, curated for top quality intakes,

TESA closes the tech talent gap by transforming passionate top 1% learners into world-class professionals who create real solutions for real problems.

Quality Internship & Practical Experience Opportunities.

Top quality internship and practical experience through various mission-critical customer projects.

Selection & Admission

There are 4 cohorts in a year, with intakes in January, March, July and September. There are two rounds of proctored assessment in Numeracy and basic computing skills, and an interview.

Job Opportunity

We connect students to employers, currently TESA has near 100% employment within 3 months of course completion.

Fee

\$2,000 (With Qucoon-provided ⁶ scholarship of 70%). 100% Scholarship opportunity exists.

6

University





CLOUD ENGINEERING & Solutions Architecture

TESA &

Specializations:

1 CLOUD ENGINEERING.

1 Cloud Fundamentals

2 Cloud Services

3 Cloud Solution Architecture

4 Infrastructure As Code

5 DevOps & DevSecOps

6 Advanced Security

7 Infrastructure Operations

The Cloud Engineering Specialization equips learners with practical skills to design, deploy, secure, and manage scalable cloud infrastructure. It focuses on hands-on experience with cloud services (AWS, Azure, Huawei, GCP), automation, DevOps practices, and real-world projects to prepare learners for in-demand cloud engineering roles.



8

Cloud Services:

Understanding and using compute, storage, networking, and managed services across cloud platforms.

Solution Architecture:

Designing scalable, resilient, and cost-effective cloud solutions aligned with business requirements.

Security:

Implementing identity management, access controls, encryption, and compliance best practices in the cloud.

Automation:

Using scripts and Infrastructure as Code tools to provision and manage cloud resources efficiently.

InOps:

(Infrastructure Operations): Managing, monitoring, scaling, and maintaining reliable cloud infrastructure in production environments.

DevOps Practices:

Applying CI/CD pipelines, containerization, and collaboration workflows to enable faster and reliable software delivery.



Programmes & Specializations

1 CLOUD ENGINEERING.

Specialization Goals:

The Cloud Engineering Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable cloud infrastructures. By the end of the program, learners will be able to:

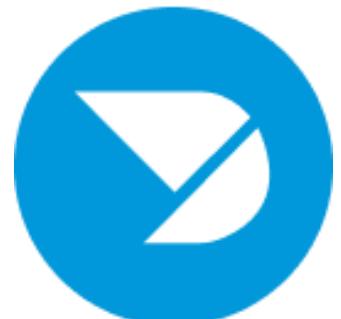
1. Understand core cloud computing principles and architectures
2. Build, deploy, and manage applications using leading cloud platforms
3. Automate infrastructure provisioning using Infrastructure-as-Code tools
4. Implement cloud security, monitoring, and cost-optimization best practices
5. Architect reliable, scalable, and resilient cloud environments
6. Prepare for industry-recognized certifications and cloud engineering roles

Audience:

1. Cloud Engineers seeking a structured, industry-aligned learning path
2. Software developers aiming to build cloud-native applications
3. Network engineers or system administrators upgrading to modern cloud operations



- 1 Cloud Fundamentals
- 2 Cloud Services
- 3 Cloud Solution Architecture
- 4 Infrastructure As Code
- 5 DevOps & DevSecOps
- 6 Advanced Security
- 7 Infrastructure Operations



9

Programmes & Specializations

1 CLOUD ENGINEERING.



TESA
Cloud
Engineering
Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced cloud engineers; Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Practical Labs:

Daily guided labs and assignments

Cloud infrastructure setup and management; Compute, storage, networking, and security labs; Automation and monitoring exercises; Troubleshooting and performance optimization.

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- *Architecture design, Deployment*
- *Security configuration*
- *Cost optimization*

Industry-relevant use cases

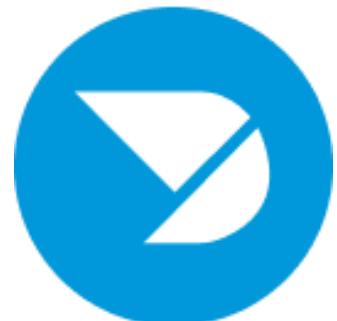
Program Duration & Schedule:

- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

Classes	Labs & Projects
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1 Cloud Fundamentals	10 Hours	10 Hours
2 Cloud Services	40 Hours	40 Hours
3 Cloud Solution Architecture	20 Hours	20 Hours
4 Infrastructure As Code	10 Hours	10 Hours
5 DevOps & DevSecOps	10 Hours	10 Hours
6 Advanced Security	20 Hours	20 Hours
7 Infrastructure Operations	40 Hours	40 Hours

10





DATA ANALYTICS & Design Thinking

TESA &

Specializations:

2 DATA ANALYTICS

1 Data Analysis Process

2 Problem Solving & Design

3 Analytics Techniques

4 Domain Expertise

5 Data Analysis Tools

6 Machine Learning Basics

7 Data Storytelling

Data Analysis Process:

Understanding and using the end-to-end data process: data collection, cleaning, exploration, analysis, and insight generation across various sources and formats.

Problem Solving & Design Thinking:

Implementing design thinking, problem framing, hypothesis testing, and structured approaches to analytics projects.

Analytics Techniques:

Mastering descriptive, diagnostic, predictive, and prescriptive analytics; statistical methods, correlations, and trend analysis.

The Data Analytics Specialization equips learners with practical skills to collect, clean, analyze, visualize, and communicate data-driven insights. It focuses on hands-on experience with tools like Excel, SQL, Python, Tableau/Power BI, and real-world projects to prepare learners for in-demand data analytics roles.

12

Domain Expertise:

Designing domain-specific solutions aligned with business requirements in areas like finance, marketing, operations, and healthcare.

Data Analysis Tools:

Using Excel, SQL, Python (Pandas, NumPy), and BI tools to provision, query, and transform data efficiently.

ML Basics:

Applying supervised and unsupervised learning, regression, classification, clustering, and model evaluation.

Data Storytelling:

Using visuals and narratives to communicate insights, build dashboards, and drive decision-making.

12



Programmes & Specializations

2 DATA ANALYTICS



Specialization Goals:

The Data Analytics Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable data solutions. By the end of the program, learners will be able to:

1. Execute the complete data analysis process from collection to insights
2. Apply problem-solving and design thinking to real business challenges
3. Use advanced analytics techniques for pattern discovery
4. Build domain-specific, scalable analytics solutions
5. Master industry tools for data manipulation and visualization
6. Implement and evaluate basic machine learning models
7. Create compelling data stories and dashboards
8. Prepare for industry-recognized certifications and data analytics roles

Audience:

1. Aspiring data analysts seeking a structured, industry-aligned learning path
2. Professionals transitioning to data-driven roles
3. Graduates or business users upgrading to analytics practices



Programmes & Specializations

1 DATA ANALYTICS



 TESA
Data Analytics
Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced data analysts. Real-time demonstrations and guided practice.

Tools & Platforms Covered:

Applied coursework covering Excel, SQL, Python, Tableau, and Power BI, with additional focus on data preparation, querying, automation, and visual storytelling within real-world analytics use cases.

Practical Labs:

Daily guided labs and assignments

Data collection & cleaning, querying & exploration, statistical analysis, modeling, visualization labs; Insight generation and optimization exercises.

Internship & Live Projects

Real-world analytics scenarios. End-to-end execution:

- Problem framing & data preparation
- Analysis & modeling
- Visualization & storytelling

Industry-relevant use cases

Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1 Data Analysis Process	10 Hours	10 Hours
2 Problem Solving & Design	40 Hours	40 Hours
3 Analytics Techniques	20 Hours	20 Hours
4 Domain Expertise	10 Hours	10 Hours
5 Data Analysis Tools	10 Hours	10 Hours
6 Machine Learning Basics	20 Hours	20 Hours
7 Data Storytelling	40 Hours	40 Hours





SOFTWARE ENGINEERING

(Java)

TESA &

Specializations:

3 SOFTWARE ENGINEERING (JAVA)

1 Java Fundamentals

2 Object-Oriented Programming

3 Three-Tier Java Application

4 Enterprise Frameworks

5 Software Architecture

6 DevOps Practices

7 Solutions Architecture

Java Fundamentals

Mastering core Java syntax, data types, control structures, collections, exception handling, and functional programming features.

Three-Tier Java Application

Building layered applications with presentation (frontend), business logic, and data persistence tiers using modern Java technologies.

Object-Oriented Programming

Applying OOP principles like encapsulation, inheritance, polymorphism, abstraction, interfaces, and design patterns in Java.

The Software Engineering (Java) Specialization equips learners with practical skills to design, build, test, deploy, and maintain enterprise-grade Java applications. It focuses on hands-on experience with modern Java ecosystems, frameworks, tools, and real-world projects to prepare learners for in-demand Java developer and software engineering roles.

16

DevOps Practices

Implementing CI/CD pipelines, containerization with Docker, automated testing, and deployment strategies for Java applications.

Software Architecture

Designing clean, and scalable system architectures using patterns like MVC, microservices, and layered architecture.

Solutions Architecture

Architecting end-to-end Java-based solutions that integrate databases, caching, and cloud deployment.

Enterprise Frameworks

Mastering Spring Boot, Spring MVC, Spring Data JPA, Hibernate, REST APIs, security, and microservices development.



Programmes & Specializations

2 JAVA

Specialization Goals:

The Software Engineering (Java) Specialization is designed to equip learners with the technical depth and hands-on experience required to build robust, scalable enterprise applications.

By the end of the program, learners will be able to:

17

1. Write efficient code using modern Java features.
2. Apply object-oriented principles and design patterns effectively
3. Build RESTful services and microservices using Spring Boot ecosystem
4. Design maintainable and scalable software architectures
5. Implement DevOps pipelines for automated build, test, and deployment
6. Architect Java solutions for real-world business problems
7. Prepare for industry-recognized certifications and Java engineering roles


TESA - SE
Software
Engineering
(Java)

1 Java Fundamentals

2 Object-Oriented Programming

3 Three-Tier Java Application

4 Enterprise Frameworks

5 Software Architecture

6 DevOps Practices

7 Solutions Architecture

Audience:

1. Aspiring Java developers seeking a structured, industry-aligned learning path
2. Programmers transitioning to enterprise Java development
3. Graduates or IT professionals upgrading to modern backend engineering



Programmes & Specializations

1 JAVA



Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced Java engineers; Real-time, automated demonstrations and guided practice.

Tools & Platforms Covered:

Hands-on with Java SE/EE, Spring Boot, Maven/Gradle, Git, Docker, PostgreSQL/MySQL, Postman, IntelliJ IDEA/Eclipse. Exposure to cloud platforms for deployment.

Practical Labs:

Daily guided labs and assignments
Core Java exercises, API development, database integration, testing, containerization, and deployment labs; Performance and security optimization.

Internship & Live Projects

Real-world Java development scenarios. End-to-end execution:

- Requirements analysis & design
- Full-stack implementation
- Testing & deployment

Industry-relevant use cases

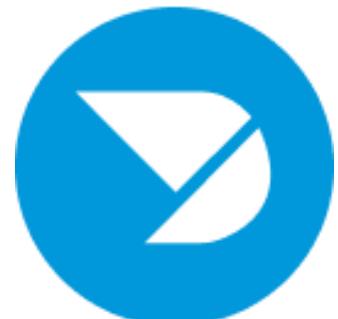
Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Java Fundamentals	20 Hours	20 Hours
2	Object-Oriented Programming	20 Hours	20 Hours
3	Three-Tier Java Application	25 Hours	25 Hours
4	Enterprise Frameworks	35 Hours	35 Hours
5	Software Architecture	20 Hours	20 Hours
6	DevOps Practices	20 Hours	20 Hours
7	Solutions Architecture	30 Hours	30 Hours

18





SOFTWARE QUALITY ASSURANCE

TESA &

Specializations:

3 QUALITY ASSURANCE

1 Quality Assurance Fundamentals

2 Software Testing (Functional and Performance)

3 Testing Tools

4 API Testing - Functional & Security

5 Test Automation Strategy

6 DevOps and CI/CD Integration

7 Solutions Architecture

Quality Assurance Fundamentals

Core QA principles, SDLC, testing types and levels, defect management, and quality metrics.

Software Testing (Functional & Performance)

Manual and exploratory testing, test case design, functional testing, regression, and performance, load, and stress testing.

Testing Tools

Hands-on use of automation frameworks for functional testing (Selenium, Cypress) and performance testing (JMeter, Gatling).

The Software Quality Assurance Specialization equips learners with practical skills to design, execute, and automate tests that ensure high-quality, reliable software delivery. It focuses on hands-on experience with modern testing tools, frameworks, and real-world projects to prepare learners for in-demand QA engineering and SDET roles.

20

API Testing

Functional, security, and performance testing of REST and SOAP APIs using Postman and RestAssured.

Test Automation Strategy

Designing maintainable automation frameworks, data-driven testing, cross-browser testing, and test suite maintenance.

DevOps & CI/CD Integration

CI/CD test integration using Jenkins, GitHub Actions, and Docker.

Solutions Architecture (QA Perspective)

End-to-end test strategies and quality gates for microservices and cloud-native systems.



Programmes & Specializations

1 QUALITY ASSURANCE



Specialization Goals:

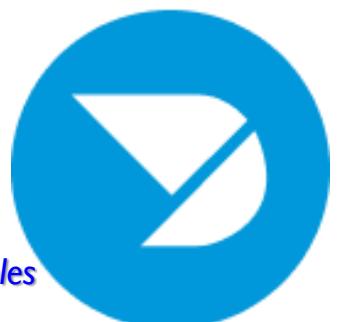
The Software Quality Assurance Specialization is designed to equip learners with the technical breadth and hands-on experience required to deliver high-quality software at scale.

By the end of the program, learners will be able to:

1. Apply core QA principles and testing methodologies effectively
2. Design and execute functional and performance test scenarios
3. Automate tests using industry-standard tools and frameworks
4. Validate APIs for functionality, security, and reliability
5. Build maintainable and scalable automation strategies
6. Integrate testing seamlessly into DevOps pipelines
7. Architect comprehensive quality assurance solutions
8. Prepare for industry-recognized certifications and QA/SDET roles

Audience:

1. Aspiring QA engineers and SDETs seeking a structured, industry-aligned learning path
2. Manual testers aiming to transition to automation and modern practices²¹
3. Developers or IT professionals upgrading to quality-focused roles



Programmes & Specializations

1 QUALITY ASSURANCE



Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced QA engineers; Real-time, automated demonstrations and guided practice.

Tools & Platforms Covered:

Hands-on with Selenium, Cypress, Appium, JMeter, Postman, RestAssured, Jenkins, Git, Docker, JUnit/TestNG. Exposure to cloud-based testing environments.

Practical Labs:

Daily guided labs and assignments

Test case writing, manual execution, automation scripting, API validation, performance scripting, pipeline integration, and defect reporting exercises.

Internship & Live Projects

Real-world QA implementation scenarios. End-to-end execution:

- Test planning & strategy
 - Automation framework development
 - Execution & reporting
- Industry-relevant use cases

Program Duration & Schedule:

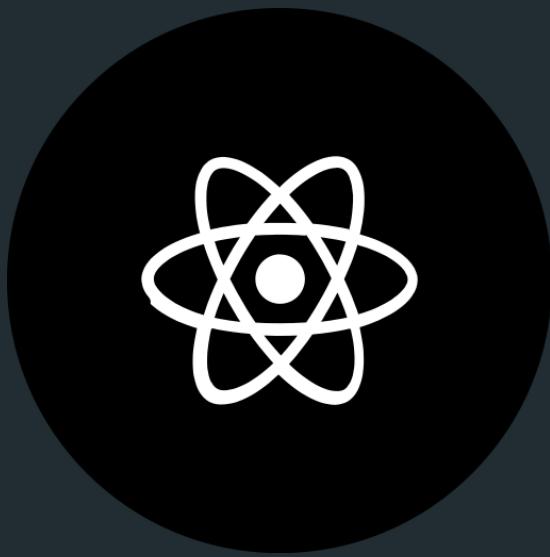
- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Quality Assurance Fundamentals	15 Hours	15 Hours
2	Software Testing	25 Hours	25 Hours
3	Testing Tools	30 Hours	30 Hours
4	API Testing	25 Hours	25 Hours
5	Test Automation Strategy	25 Hours	25 Hours
6	DevOps and CI/CD Integration	20 Hours	20 Hours
7	Solutions Architecture	20 Hours	20 Hours

22





SOFTWARE ENGINEERING (REACT)

TESA &

Specializations:

3 SOFTWARE ENGINEERING (REACT)

1 React Fundamentals

2 Hooks & State Management

3 Component Architecture & Design

4 Routing & Navigation

5 Data Handling & Fetching

6 Advanced Concepts(Performance)

7 DevOps and Testing

React Fundamentals:

Introduces core React concepts including JSX, components, props, and rendering, enabling learners to build dynamic and reusable UI.

React Hooks & State Management:

Covers hooks, local and global state management, side effects, and data flow patterns to manage complex application.

Component Architecture:

Explores components structure & reusable design patterns for building clean apps.

The React Software Engineering Specialization equips learners with the practical skills required to build scalable, high-performance, and maintainable modern web applications using React. The course focuses on real-world component design, state management, and performance optimization making it a must-attend program for developers aiming to master professional frontend engineering.

24

Routing & Navigation:

Teaches client-side routing, navigation strategies, and layout management for building multi-page and single-page applications.

Data Handling/Fetching:

Focuses on managing API-driven state, handling asynchronous data, and authentication flows.

Advanced Concepts:

Covers rendering optimization, memoization, code splitting, lazy loading, and advanced React techniques.

DevOps and Testing:

Introduces testing strategies, CI/CD workflows, and deployment pipelines.



Programmes & Specializations

2 REACT



Specialization Goals:

This Specialization is designed to take learners from foundational React knowledge to building production-ready applications using industry-standard workflows and best practices..

By the end of the program, learners will be able to:

25

1. Build scalable and reusable React applications
2. Manage application state using modern React patterns
3. Design clean component architectures and UI systems
4. Integrate and manage APIs and backend services
5. Optimize performance for real-world production use
6. Test, deploy, and maintain React applications confidently

Audience:

1. Frontend developers seeking to master modern React development
2. Software engineers building full-stack or frontend-heavy applications
3. Beginners with JavaScript knowledge aiming to transition into frontend development

1 React Fundamentals

2 Hooks & State Management

3 Component Architecture & Design

4 Routing & Navigation

5 Data Handling & Fetching

6 Advanced Concepts(Performance)

7 DevOps and Testing

25



Programmes & Specializations

1 REACT



TESA

Software
Engineering
(React)

Structure

Classes Labs & Projects

1	React Fundamentals	10 Hours	10 Hours
2	Hooks & State Management	40 Hours	40 Hours
3	Component Architecture	20 Hours	20 Hours
4	Routing & Navigation	10 Hours	10 Hours
5	Data Handling & Fetching	10 Hours	10 Hours
6	Advanced Concepts	20 Hours	20 Hours
7	DevOps and Testing	40 Hours	40 Hours

Training Mode:

Instructor-led online classes
Live interactive coding sessions
Guided hands-on labs and exercises
Project-based learning and peer collaboration

Cloud Platforms Covered:

Learners will work with React, modern JavaScript (ES6+), Node.js tooling, package managers, routing libraries, state management solutions, testing frameworks, CI/CD tools, and cloud deployment platforms.

Practical Labs:

Hands-on labs will involve building reusable components, implementing routing and state management, integrating APIs, optimizing performance, and deploying React applications using modern DevOps workflows.

Internship & Live Projects

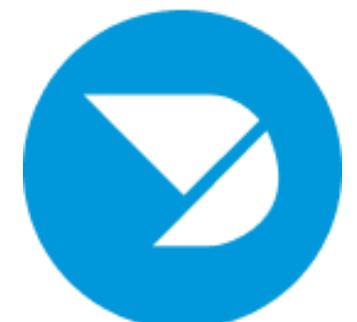
Learners will complete real-world frontend projects involving full application builds, API integration, performance optimization, testing, and deployment, simulating professional React development environments.

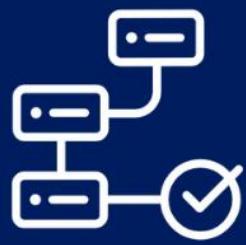
Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

26

University





SOLUTIONS ARCHITECTURE

TESA &

Specializations:

3 SOLUTIONS ARCHITECTURE

- 1 Cloud Architecture Fundamentals
- 2 Design for Performance
- 3 Design for Security
- 4 Design for Cost Efficiency
- 5 Design for Operational Excellence
- 6 Design for Reliability

Cloud Architecture Fundamentals

Mastering core architecture principles, design patterns, well-architected frameworks, and trade-off analysis.

Design for Performance

Optimizing latency, throughput, scalability, caching, load balancing, and database performance strategies.

Design for Security

Implementing identity management, encryption, network security, compliance, and least-privilege access controls.

The Solutions Architecture Specialization equips learners with practical skills to design, evaluate, and implement scalable, secure, cost-effective, and reliable cloud-native solutions. It focuses on hands-on experience with multi-cloud platforms (AWS, Azure, Huawei, GCP), architecture patterns, and real-world projects to prepare learners for in-demand solutions architect roles.

28



Design for Cost Efficiency

Applying cost optimization techniques, right-sizing, reserved instances, tagging, and budgeting best practices.

Design for Operational Excellence

Building monitoring, logging, alerting, automation, CI/CD integration, and operational runbooks.

Design for Reliability

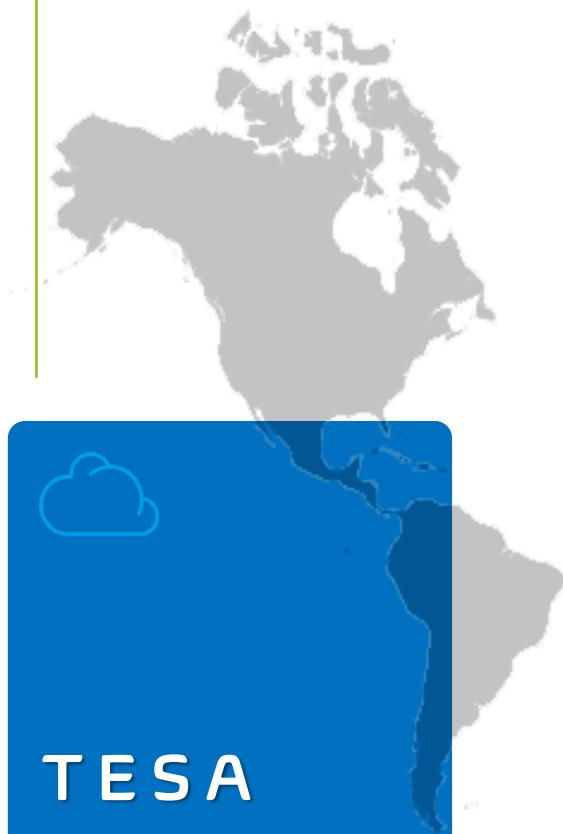
Achieving high availability, fault tolerance, disaster recovery, backups, and chaos engineering principles.

28



Programmes & Specializations

2 SOLUTIONS ARCHITECTURE



TESA
Solution
Architecture

- 1 Cloud Architecture Fundamentals**
- 2 Design for Performance**
- 3 Design for Security**
- 4 Design for Cost Efficiency**
- 5 Design for Operational Excellence**
- 6 Design for Reliability**

Specialization Goals:

The Solutions Architecture

Specialization is designed to equip learners with the technical breadth and hands-on experience required to architect scalable, resilient cloud solutions.

By the end of the program, learners will be able to:

- 1. Apply architecture fundamentals and design patterns effectively*
- 2. Design high-performance systems with optimal scalability and speed*
- 3. Secure solutions using identity, encryption, and compliance best practices*
- 4. Optimize costs through resource management and pricing models*
- 5. Achieve operational excellence with monitoring and automation*
- 6. Build highly reliable and fault-tolerant architectures*
- 7. Prepare for industry-recognized solutions architect certifications*

Audience:

- 1. Cloud practitioners seeking a structured path to solutions architecture*
- 2. Developers or engineers aiming to design end-to-end systems²⁹*
- 3. IT professionals upgrading to strategic cloud architecture roles*



Programmes & Specializations

1 SOLUTION ARCHITECTURE



Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced solutions architects. Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Practical Labs:

Daily guided labs and assignments
Architecture diagramming, workload migration, performance tuning, security hardening, cost analysis, monitoring setup, and reliability testing exercises. Cloud infrastructure setup and management; Troubleshooting and performance optimization.

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- Architecture design, Deployment
- Security configuration
- Cost optimization

Industry-relevant use cases

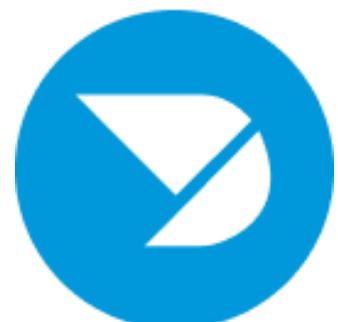
Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Cloud Architecture Fundamentals	10 Hours	10 Hours
2	Design for Performance	40 Hours	40 Hours
3	Design for Security	20 Hours	20 Hours
4	Design for Cost Efficiency	10 Hours	10 Hours
5	Design for Operational Excellence	10 Hours	10 Hours
6	Design for Reliability	20 Hours	20 Hours

30





ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

TESA & Specializations:

3 AI & ML

1 AI & ML Fundamentals

2 Python for ML

3 Deep Learning

4 Machine Learning Models

5 Generative AI

6 Agentic AI

7 AI Solutions Architecture

AI & ML Fundamentals

Introduces core AI & ML concepts, types of learning and essential tools, enabling learners to understand where and how AI creates value across real-world applications.

Python for ML:

Covers Python programming for data manipulation, modeling, and experimentation using industry-standard libraries.

ML Models:

Explores learning models, model evaluation, feature engineering, and optimization techniques for solving real-world prediction and classification problems.

The AI & ML Specialization equips learners with the foundational knowledge and hands-on skills required to build, deploy, and scale intelligent systems using modern AI and machine learning techniques. The program focuses on practical implementation, real-world use cases, and emerging AI paradigms such as Generative and Agentic AI, making it an essential course for anyone looking to stay relevant in the AI-driven future.

32

Deep Learning:

Focuses on neural networks, deep learning architectures, and training techniques used to build pattern recognition models.

Generative AI:

Examines generative models such as LLMs and diffusion systems for building text/image generation AI.

Agentic AI:

Introduces autonomous and multi-agent AI systems, covering decision-making, planning, tool usage, and orchestration.

Data Storytelling:

Covers AI system design, including data pipelines, model deployment, scalability, monitoring & integration.



Programmes & Specializations

2 AI & ML



Specialization Goals:

The AI & ML Specialization is designed to progressively move learners from foundational understanding to advanced, production-ready AI systems through hands-on projects and real-world architectures.

By the end of the program, learners will be able to:

1. Understand and apply core AI and machine learning concepts
2. Build and evaluate machine learning and deep learning models
3. Develop generative AI and agent-based systems for real-world use cases
4. Design scalable AI solutions and deployment architectures
5. Integrate AI models into applications and business workflows
6. Prepare for AI engineering, ML engineering, and applied AI roles

Audience:

1. Software developers and engineers transitioning into AI and machine learning roles
2. Data analysts and technical professionals seeking applied AI skills
3. Product builders and innovators looking to embed AI into real-world solutions



1 AI & ML Fundamentals

2 Python for ML

3 Deep Learning

4 Machine Learning Models

5 Generative AI

6 Agentic AI

7 AI Solutions Architecture

Programmes & Specializations

1 AI & ML



Training Mode:

Instructor-led online classes Live interactive sessions with AI practitioners Hands-on coding demonstrations and guided exercises Project-based learning and collaborative problem-solving.

Tools & Platforms Covered:

Learners will work with modern AI and ML tools and platforms including Python, NumPy, Pandas, Scikit-learn, TensorFlow or PyTorch, Jupyter Notebooks, generative AI frameworks, agent orchestration tools, and cloud-based AI services for deployment and scalability..

Practical Labs:

Hands-on labs will guide learners through building ML models, training deep learning networks, creating generative AI apps, and developing autonomous agents, with labs covering the whole model lifecycle.

Internship & Live Projects

Industry-relevant AI projects with real datasets and real-world problem statements, covering:

- Model development and deployment.
- AI solution architecture.
- End-to-End AI implementation.

Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	AI & ML Fundamentals	10 Hours	10 Hours
2	Python for ML	40 Hours	40 Hours
3	Deep Learning	20 Hours	20 Hours
4	ML Models	10 Hours	10 Hours
5	Generative AI	10 Hours	10 Hours
6	Agentic AI	20 Hours	20 Hours
7	AI Solutions Architecture	40 Hours	40 Hours

34



34



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Univaciti

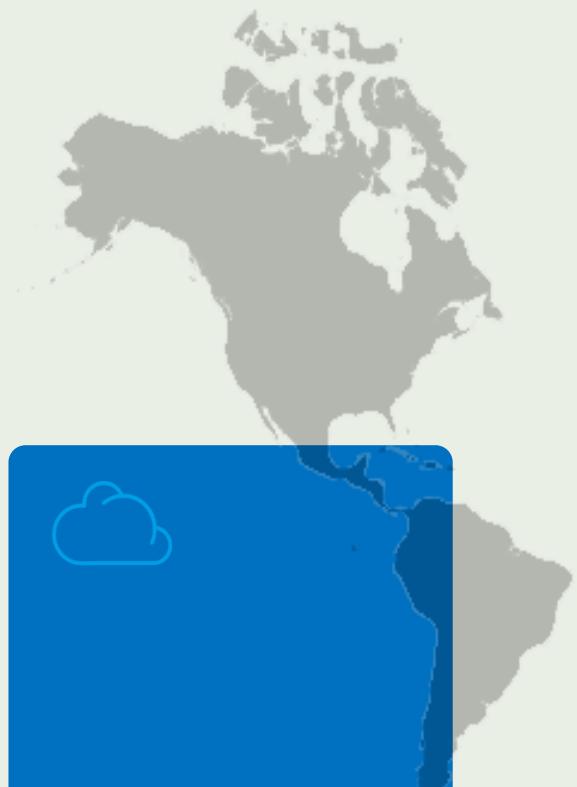
NEST + Employee Skills Enhancement

*Achieving mastery in
business-relevant tech skills.*

35



Programmes & Specializations



NEST

Tech Skills Accelerator
Programme.

1 Cloud Engineering

2 Solution Architecture

3 Data Analysis & Analytics

4 Software Engineering - Java

5 Software Engineering - React

6 Quality Assurance

What is NEST.

Flexible but intensive specialization courses, curated for employees.

NEST closes the tech talent quality gap through customized training for the organization's employees.

Quality Internship & Practical Experience Opportunities.

Top quality internship and practical experience through various mission-critical customer projects.

Curriculum

Flexible and customized based on specific peculiarities of the organization: Graduate Academy, Entry-Level School, skills upgrade plan, IT Appreciation training, women in tech training, Tech for business and operations employees, etc.

Fee

On request.

36



NEST



CLOUD ENGINEERING & Solutions Architecture

NEST &

Specializations:

1 CLOUD ENGINEERING.

1 Cloud Fundamentals

2 Cloud Services

3 Cloud Solution Architecture

4 Infrastructure As Code

5 DevOps & DevSecOps

6 Advanced Security

7 Infrastructure Operations

The Cloud Engineering Specialization equips learners with practical skills to design, deploy, secure, and manage scalable cloud infrastructure. It focuses on hands-on experience with cloud services (AWS, Azure, Huawei, GCP), automation, DevOps practices, and real-world projects to prepare learners for in-demand cloud engineering roles.



38

Cloud Services:

Understanding and using compute, storage, networking, and managed services across cloud platforms.

Solution Architecture:

Designing scalable, resilient, and cost-effective cloud solutions aligned with business requirements.

Security:

Implementing identity management, access controls, encryption, and compliance best practices in the cloud.

Automation:

Using scripts and Infrastructure as Code tools to provision and manage cloud resources efficiently.

InOps:

(Infrastructure Operations): Managing, monitoring, scaling, and maintaining reliable cloud infrastructure in production environments.

DevOps Practices:

Applying CI/CD pipelines, containerization, and collaboration workflows to enable faster and reliable software delivery.



Programmes & Specializations

1 CLOUD ENGINEERING.

Specialization Goals:

The Cloud Engineering Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable cloud infrastructures. By the end of the program, learners will be able to:

1. Understand core cloud computing principles and architectures
2. Build, deploy, and manage applications using leading cloud platforms
3. Automate infrastructure provisioning using Infrastructure-as-Code tools
4. Implement cloud security, monitoring, and cost-optimization best practices
5. Architect reliable, scalable, and resilient cloud environments
6. Prepare for industry-recognized certifications and cloud engineering roles

Audience:

1. Cloud Engineers seeking a structured, industry-aligned learning path
2. Corporate IT teams, system administrators, developers, and engineers upskilling to meet organizational cloud adoption goals.



- 1 Cloud Fundamentals
- 2 Cloud Services
- 3 Cloud Solution Architecture
- 4 Infrastructure As Code
- 5 DevOps & DevSecOps
- 6 Advanced Security
- 7 Infrastructure Operations



Programmes & Specializations

1 CLOUD ENGINEERING.



NEST
Cloud
Engineering
Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced cloud engineers; Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Corporate Projects & Application:

Organization-aligned projects. End-to-end execution:

- Current-state assessment
- Target architecture design
- Implementation & optimization
- Knowledge transfer to team

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- Architecture design, Deployment
- Security configuration
- Cost optimization

Industry-relevant use cases

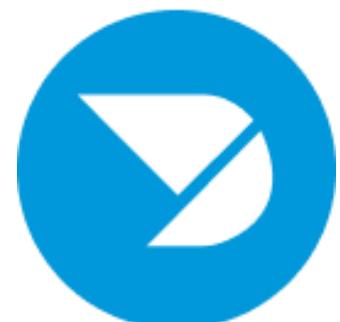
Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Cloud Fundamentals	10 Hours	10 Hours
2	Cloud Services	40 Hours	40 Hours
3	Cloud Solution Architecture	20 Hours	20 Hours
4	Infrastructure As Code	10 Hours	10 Hours
5	DevOps & DevSecOps	10 Hours	10 Hours
6	Advanced Security	20 Hours	20 Hours
7	Infrastructure Operations	40 Hours	40 Hours

40





DATA ANALYTICS & Design Thinking

NEST &

Specializations:

2 DATA ANALYTICS

1 Data Analysis Process

2 Problem Solving & Design

3 Analytics Techniques

4 Domain Expertise

5 Data Analysis Tools

6 Machine Learning Basics

7 Data Storytelling

Data Analysis Process:

Understanding and using the end-to-end data process: data collection, cleaning, exploration, analysis, and insight generation across various sources and formats.

Problem Solving & Design Thinking:

Implementing design thinking, problem framing, hypothesis testing, and structured approaches to analytics projects.

Analytics Techniques:

Mastering descriptive, diagnostic, predictive, and prescriptive analytics; statistical methods, correlations, and trend analysis.

The **Data Analytics Specialization** equips learners with practical skills to collect, clean, analyze, visualize, and communicate data-driven insights. It focuses on hands-on experience with tools like Excel, SQL, Python, Tableau/Power BI, and real-world projects to prepare learners for in-demand data analytics roles.

42

Domain Expertise:

Designing domain-specific solutions aligned with business requirements in areas like finance, marketing, operations, and healthcare.

Data Analysis Tools:

Using Excel, SQL, Python (Pandas, NumPy), and BI tools to provision, query, and transform data efficiently.

ML Basics:

Applying supervised and unsupervised learning, regression, classification, clustering, and model evaluation.

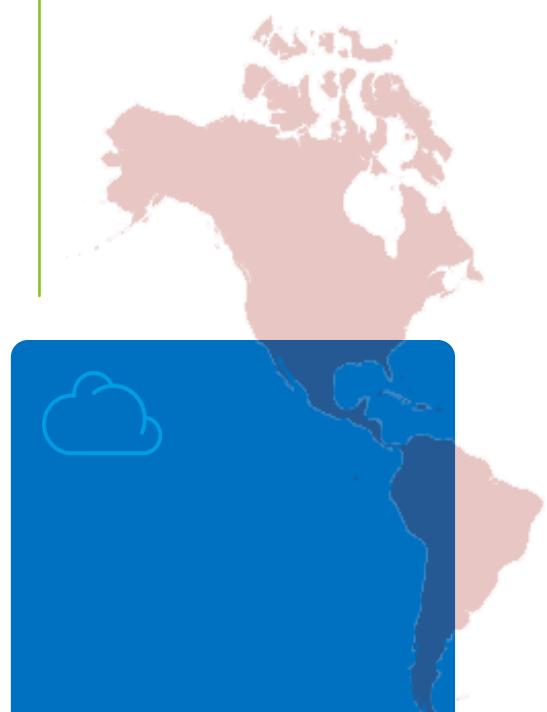
Data Storytelling:

Using visuals and narratives to communicate insights, build dashboards, and drive decision-making.



Programmes & Specializations

2 DATA ANALYTICS



NEST - DA

Data Analytics & Design Thinking

1 Data Analysis Process

2 Problem Solving & Design

3 Analytics Techniques

4 Domain Expertise

5 Data Analysis Tools

6 Machine Learning Basics

7 Data Storytelling

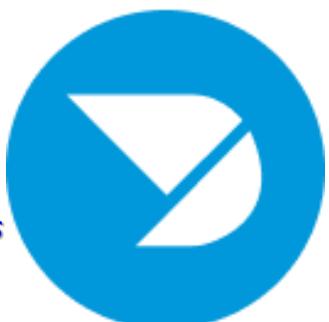
Specialization Goals:

The Data Analytics Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable data solutions. By the end of the program, learners will be able to:

1. Execute the complete data analysis process from collection to insights
2. Apply problem-solving and design thinking to real business challenges
3. Use advanced analytics techniques for pattern discovery
4. Build domain-specific, scalable analytics solutions
5. Master industry tools for data manipulation and visualization
6. Implement and evaluate basic machine learning models
7. Create compelling data stories and dashboards
8. Prepare for industry-recognized certifications and data analytics roles

Audience:

1. Aspiring data analysts seeking a structured, industry-aligned learning path
2. Professionals transitioning to data-driven roles
3. Graduates or business users upgrading to analytics practices



Programmes & Specializations

1 DATA ANALYTICS



NEST
Data Analytics
Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced data analysts. Real-time demonstrations and guided practice.

Tools & Platforms Covered:

Applied coursework covering Excel, SQL, Python, Tableau, and Power BI, with additional focus on data preparation, querying, automation, and visual storytelling within real-world analytics use cases.

Practical Labs:

Daily guided labs and assignments

Data collection & cleaning, querying & exploration, statistical analysis, modeling, visualization labs; Insight generation and optimization exercises.

Internship & Live Projects

Real-world analytics scenarios. End-to-end execution:

- Problem framing & data preparation
- Analysis & modeling
- Visualization & storytelling

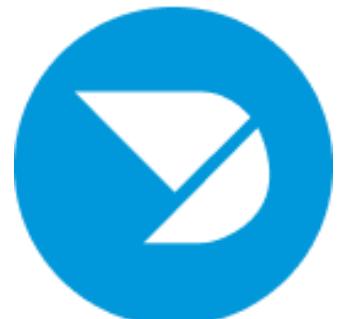
Industry-relevant use cases

Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1 Data Analysis Process	10 Hours	10 Hours
2 Problem Solving & Design	40 Hours	40 Hours
3 Analytics Techniques	20 Hours	20 Hours
4 Domain Expertise	10 Hours	10 Hours
5 Data Analysis Tools	10 Hours	10 Hours
6 Machine Learning Basics	20 Hours	20 Hours
7 Data Storytelling	40 Hours	40 Hours





SOFTWARE ENGINEERING

(Java)

NEST &

Specializations:

3 SOFTWARE ENGINEERING (JAVA)

1 Java Fundamentals

2 Object-Oriented Programming

3 Three-Tier Java Application

4 Enterprise Frameworks

5 Software Architecture

6 DevOps Practices

7 Solutions Architecture

Java Fundamentals

Mastering core Java syntax, data types, control structures, collections, exception handling, and functional programming features.

Three-Tier Java Application

Building layered applications with presentation (frontend), business logic, and data persistence tiers using modern Java technologies.

Object-Oriented Programming

Applying OOP principles like encapsulation, inheritance, polymorphism, abstraction, interfaces, and design patterns in Java.

The Software Engineering (Java) Specialization equips learners with practical skills to design, build, test, deploy, and maintain enterprise-grade Java applications. It focuses on hands-on experience with modern Java ecosystems, frameworks, tools, and real-world projects to prepare learners for in-demand Java developer and software engineering roles.

46

DevOps Practices

Implementing CI/CD pipelines, containerization with Docker, automated testing, and deployment strategies for Java applications.

Software Architecture

Designing clean, and scalable system architectures using patterns like MVC, microservices, and layered architecture.

Solutions Architecture

Architecting end-to-end Java-based solutions that integrate databases, caching, and cloud deployment.

Enterprise Frameworks

Mastering Spring Boot, Spring MVC, Spring Data JPA, Hibernate, REST APIs, security, and microservices development.



Programmes & Specializations

2 JAVA

Specialization Goals:

The Software Engineering (Java) Specialization is designed to equip learners with the technical depth and hands-on experience required to build robust, scalable enterprise applications.

By the end of the program, learners will be able to:

47

1. Write efficient code using modern Java features.
2. Apply object-oriented principles and design patterns effectively
3. Build RESTful services and microservices using Spring Boot ecosystem
4. Design maintainable and scalable software architectures
5. Implement DevOps pipelines for automated build, test, and deployment
6. Architect Java solutions for real-world business problems
7. Prepare for industry-recognized certifications and Java engineering roles

NEST - SE
Software
Engineering
(Java)

1 Java Fundamentals

2 Object-Oriented Programming

3 Three-Tier Java Application

4 Enterprise Frameworks

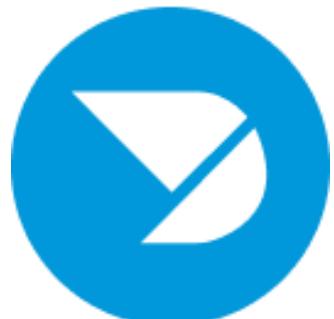
5 Software Architecture

6 DevOps Practices

7 Solutions Architecture

Audience:

1. Aspiring Java developers seeking a structured, industry-aligned learning path
2. Programmers transitioning to enterprise Java development
3. Graduates or IT professionals upgrading to modern backend engineering



Programmes & Specializations

1 JAVA



NEST

Software
Engineering
(Java)

Structure

Classes Labs & Projects

1	Java Fundamentals	20 Hours	20 Hours
2	Object-Oriented Programming	20 Hours	20 Hours
3	Three-Tier Java Application	25 Hours	25 Hours
4	Enterprise Frameworks	35 Hours	35 Hours
5	Software Architecture	20 Hours	20 Hours
6	DevOps Practices	20 Hours	20 Hours
7	Solutions Architecture	30 Hours	30 Hours

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced

Java engineers; Real-time, automated

demonstrations and guided practice.

Tools & Platforms Covered:

Hands-on with Java SE/EE, Spring Boot,

Maven/Gradle, Git, Docker, PostgreSQL/MySQL,

Postman, IntelliJ IDEA/Eclipse. Exposure to cloud

platforms for deployment.

Practical Labs:

Daily guided labs and assignments

Core Java exercises, API development, database

integration, testing, containerization, and

deployment labs; Performance and security

optimization.

Internship & Live Projects

Real-world Java development scenarios. End-to-end execution:

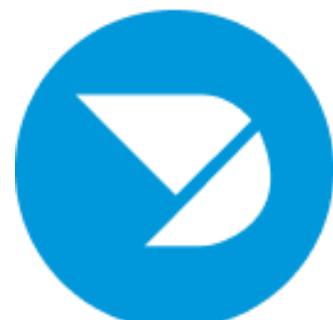
- Requirements analysis & design
 - Full-stack implementation
 - Testing & deployment
- Industry-relevant use cases*

Program Duration & Schedule:

- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

48

University





SOFTWARE QUALITY ASSURANCE

NEST &

Specializations:

3 SOFTWARE QUALITY ASSURANCE

1 Quality Assurance Fundamentals

2 Software Testing (Functional and Performance)

3 Testing Tools

4 API Testing - Functional & Security

5 Test Automation Strategy

6 DevOps and CI/CD Integration

7 Solutions Architecture

Quality Assurance Fundamentals

Core QA principles, SDLC, testing types and levels, defect management, and quality metrics.

Software Testing (Functional & Performance)

Manual and exploratory testing, test case design, functional testing, regression, and performance, load, and stress testing.

Testing Tools

Hands-on use of automation frameworks for functional testing (Selenium, Cypress) and performance testing (JMeter, Gatling).

The Software Quality Assurance Specialization equips learners with practical skills to design, execute, and automate tests that ensure high-quality, reliable software delivery. It focuses on hands-on experience with modern testing tools, frameworks, and real-world projects to prepare learners for in-demand QA engineering and SDET roles.

50

API Testing

Functional, security, and performance testing of REST and SOAP APIs using Postman and RestAssured.

Test Automation Strategy

Designing maintainable automation frameworks, data-driven testing, cross-browser testing, and test suite maintenance.

DevOps & CI/CD Integration

CI/CD test integration using Jenkins, GitHub Actions, and Docker.

Solutions Architecture (QA Perspective)

End-to-end test strategies and quality gates for microservices and cloud-native systems.



Programmes & Specializations

1 SOFTWARE QUALITY ASSURANCE



Specialization Goals:

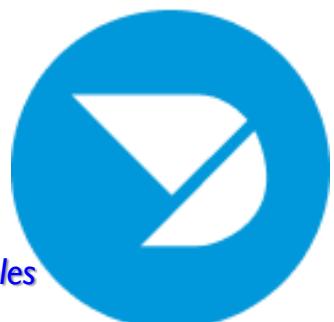
The Software Quality Assurance Specialization is designed to equip learners with the technical breadth and hands-on experience required to deliver high-quality software at scale.

By the end of the program, learners will be able to:

1. Apply core QA principles and testing methodologies effectively
2. Design and execute functional and performance test scenarios
3. Automate tests using industry-standard tools and frameworks
4. Validate APIs for functionality, security, and reliability
5. Build maintainable and scalable automation strategies
6. Integrate testing seamlessly into DevOps pipelines
7. Architect comprehensive quality assurance solutions
8. Prepare for industry-recognized certifications and QA/SDET roles

Audience:

1. Aspiring QA engineers and SDETs seeking a structured, industry-aligned learning path
2. Manual testers aiming to transition to automation and modern practices
3. Developers or IT professionals upgrading to quality-focused roles



Programmes & Specializations

1 QUALITY ASSURANCE



Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced QA engineers; Real-time, automated demonstrations and guided practice.

Tools & Platforms Covered:

Hands-on with Selenium, Cypress, Appium, JMeter, Postman, RestAssured, Jenkins, Git, Docker, JUnit/TestNG. Exposure to cloud-based testing environments.

Practical Labs:

Daily guided labs and assignments

Test case writing, manual execution, automation scripting, API validation, performance scripting, pipeline integration, and defect reporting exercises.

Internship & Live Projects

Real-world QA implementation scenarios. End-to-end execution:

- Test planning & strategy
 - Automation framework development
 - Execution & reporting
- Industry-relevant use cases

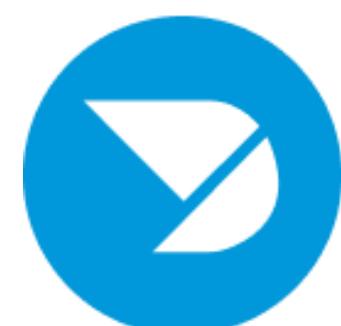
Program Duration & Schedule:

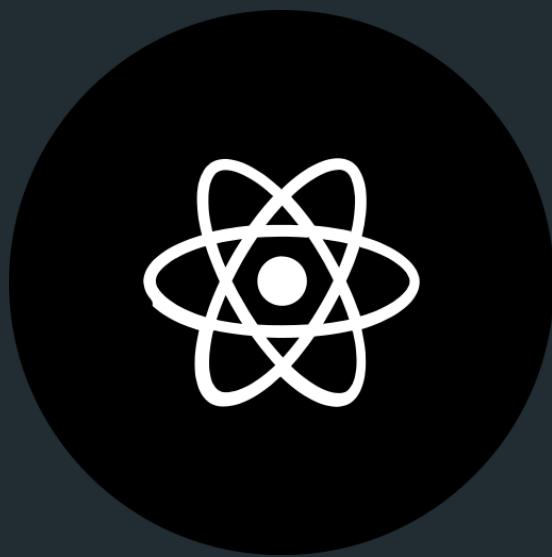
- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Quality Assurance Fundamentals	15 Hours	15 Hours
2	Software Testing	25 Hours	25 Hours
3	Testing Tools	30 Hours	30 Hours
4	API Testing	25 Hours	25 Hours
5	Test Automation Strategy	25 Hours	25 Hours
6	DevOps and CI/CD Integration	20 Hours	20 Hours
7	Solutions Architecture	20 Hours	20 Hours

52





SOFTWARE ENGINEERING (REACT)

NEST &

Specializations:

3 SOFTWARE ENGINEERING (REACT)

1 React Fundamentals

2 Hooks & State Management

3 Component Architecture & Design

4 Routing & Navigation

5 Data Handling & Fetching

6 Advanced Concepts(Performance)

7 DevOps and Testing

The React Software Engineering Specialization equips learners with the practical skills required to build scalable, high-performance, and maintainable modern web applications using React. The course focuses on real-world component design, state management, and performance optimization making it a must-attend program for developers aiming to master professional frontend engineering.

54



React Fundamentals:

Introduces core React concepts including JSX, components, props, and rendering, enabling learners to build dynamic and reusable UI.

React Hooks & State Management:

Covers hooks, local and global state management, side effects, and data flow patterns to manage complex application.

Component Architecture:

Explores components structure & reusable design patterns for building clean apps.

Routing & Navigation:

Teaches client-side routing, navigation strategies, and layout management for building multi-page and single-page applications.

Data Handling/Fetching:

Focuses on managing API-driven state, handling asynchronous data, and authentication flows.

Advanced Concepts:

Covers rendering optimization, memoization, code splitting, lazy loading, and advanced React techniques.

DevOps and Testing:

Introduces testing strategies, CI/CD workflows, and deployment pipelines.



Programmes & Specializations

2 REACT



NEST - SE Software Engineering (React)

- 1 React Fundamentals
- 2 Hooks & State Management
- 3 Component Architecture & Design
- 4 Routing & Navigation
- 5 Data Handling & Fetching
- 6 Advanced Concepts(Performance)
- 7 DevOps and Testing

Specialization Goals:

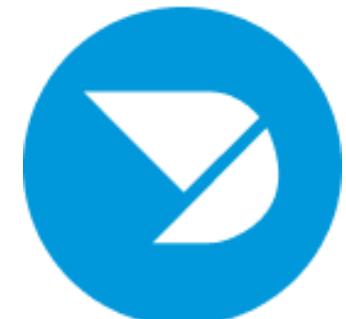
This Specialization is designed to take learners from foundational React knowledge to building production-ready applications using industry-standard workflows and best practices..

By the end of the program, learners will be able to:

1. Build scalable and reusable React applications
2. Manage application state using modern React patterns
3. Design clean component architectures and UI systems
4. Integrate and manage APIs and backend services
5. Optimize performance for real-world production use
6. Test, deploy, and maintain React applications confidently

Audience:

1. Frontend developers seeking to master modern React development
2. Software engineers building full-stack or frontend-heavy applications
3. Beginners with JavaScript knowledge aiming to transition into frontend development



Programmes & Specializations

1 REACT



NEST

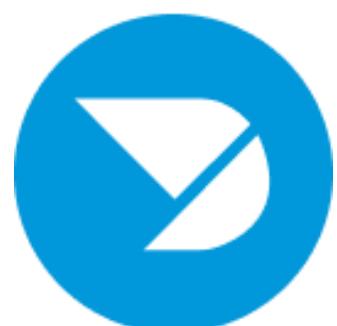
Software Engineering (React)

Structure

Classes Labs & Projects

1	React Fundamentals	10 Hours	10 Hours
2	Hooks & State Management	40 Hours	40 Hours
3	Component Architecture	20 Hours	20 Hours
4	Routing & Navigation	10 Hours	10 Hours
5	Data Handling & Fetching	10 Hours	10 Hours
6	Advanced Concepts	20 Hours	20 Hours
7	DevOps and Testing	40 Hours	40 Hours

56





SOLUTIONS ARCHITECTURE

NEST &

Specializations:

1 SOLUTIONS ARCHITECTURE

- 1 Cloud Architecture Fundamentals
- 2 Design for Performance
- 3 Design for Security
- 4 Design for Cost Efficiency
- 5 Design for Operational Excellence
- 6 Design for Reliability

58

Cloud Architecture Fundamentals

Mastering core architecture principles, design patterns, well-architected frameworks, and trade-off analysis.

Design for Performance

Optimizing latency, throughput, scalability, caching, load balancing, and database performance strategies.

Design for Security

Implementing identity management, encryption, network security, compliance, and least-privilege access controls.

Design for Cost Efficiency

Applying cost optimization techniques, right-sizing, reserved instances, tagging, and budgeting best practices.

Design for Operational Excellence

Building monitoring, logging, alerting, automation, CI/CD integration, and operational runbooks.

Design for Reliability

Achieving high availability, fault tolerance, disaster recovery, backups, and chaos engineering principles.

58



Programmes & Specializations

1 SOLUTIONS ARCHITECTURE



Specialization Goals:

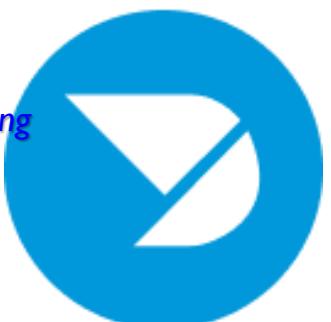
The Solutions Architecture Specialization is designed to equip learners with the technical breadth and hands-on experience required to architect scalable, resilient cloud solutions.

By the end of the program, learners will be able to:

1. *Apply architecture fundamentals and design patterns effectively*
2. *Design high-performance systems with optimal scalability and speed*
3. *Secure solutions using identity, encryption, and compliance best practices*
4. *Optimize costs through resource management and pricing models*
5. *Achieve operational excellence with monitoring and automation*
6. *Build highly reliable and fault-tolerant architectures*
7. *Prepare for industry-recognized solutions architect certifications*

Audience:

1. *Cloud practitioners seeking a structured path to solutions architecture*
2. *Developers or engineers aiming to design end-to-end systems⁵⁹*
3. *IT professionals upgrading to strategic cloud architecture roles*



Programmes & Specializations

1 SOLUTIONS ARCHITECTURE



Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced solutions architects. Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Practical Labs:

Daily guided labs and assignments
Architecture diagramming, workload migration, performance tuning, security hardening, cost analysis, monitoring setup, and reliability testing exercises. Cloud infrastructure setup and management; Troubleshooting and performance optimization.

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- Architecture design, Deployment
- Security configuration
- Cost optimization

Industry-relevant use cases

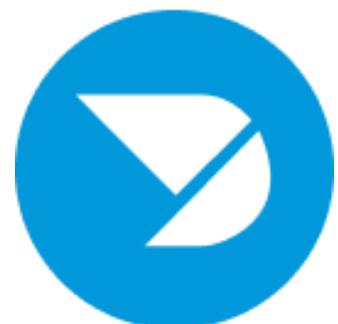
Program Duration & Schedule:

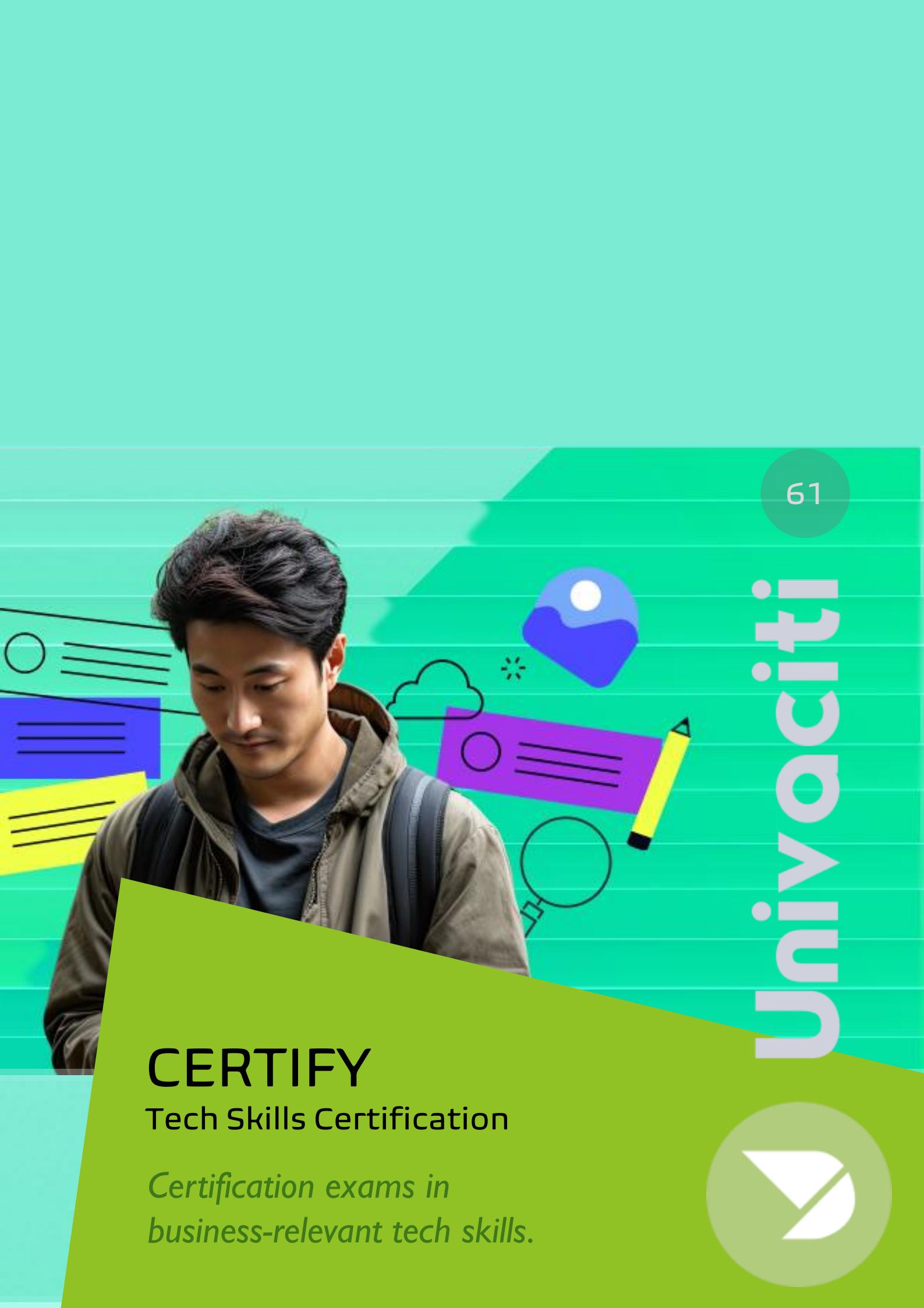
- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Cloud Architecture Fundamentals	10 Hours	10 Hours
2	Design for Performance	40 Hours	40 Hours
3	Design for Security	20 Hours	20 Hours
4	Design for Cost Efficiency	10 Hours	10 Hours
5	Design for Operational Excellence	10 Hours	10 Hours
6	Design for Reliability	20 Hours	20 Hours

60





61

University

CERTIFY

Tech Skills Certification

*Certification exams in
business-relevant tech skills.*



CERTIFICATION &

Specializations:

2 UNIVACITI CERTIFY®



Certification in Key Computing Areas

This certification program delivers industry-relevant training across critical computing domains, equipping learners with practical, job-ready skills while helping organizations build high-performing technology teams.

62

Cloud Engineering: *Design, deploy, secure, and manage scalable cloud infrastructure using modern platforms and automation tools.*

Solutions Architecture: *Create reliable, cost-effective, and scalable technology solutions aligned with business objectives.*

Data Analytics: *Transform data into actionable insights through analysis, visualization, and reporting.*

Quality Assurance: *Improve software reliability through structured testing, quality frameworks, and process optimization.*

- 1 Cloud Engineering
- 2 Solution Architecture
- 3 Data Analysis & Analytics
- 4 Software Engineering - Java
- 5 Software Engineering - React
- 6 Artificial Intelligence & ML
- 7 Quality Assurance

Fee
\$100



62



CLOUD ENGINEERING & Solutions Architecture

CERTIFY IN

Cloud Engineering

2 UNIVACITI CERTIFY®

1 Cloud Fundamentals

2 Cloud Services

3 Cloud Solution Architecture

4 Infrastructure As Code

5 DevOps & DevSecOps

6 Advanced Security

7 Infrastructure Operations

The Cloud Engineering Certification certifies practical skills to design, deploy, secure, and manage scalable cloud infrastructure. It focuses on hands-on experience with cloud services (AWS, Azure, Huawei, GCP), automation, DevOps practices, and real-world projects to prepare learners for in-demand cloud engineering roles.



64

Cloud Services:

Understanding and using compute, storage, networking, and managed services across cloud platforms.

Security:

Implementing identity management, access controls, encryption, and compliance best practices in the cloud.

InOps:

(Infrastructure Operations): Managing, monitoring, scaling, and maintaining reliable cloud infrastructure in production environments.

Solution Architecture:

Designing scalable, resilient, and cost-effective cloud solutions aligned with business requirements.

Automation:

Using scripts and Infrastructure as Code tools to provision and manage cloud resources efficiently.

DevOps Practices:

Applying CI/CD pipelines, containerization, and collaboration workflows to enable faster and reliable software delivery.

64



Programmes & Specializations

1 CLOUD ENGINEERING.

Specialization Goals:

The Cloud Engineering Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable cloud infrastructures. By the end of the program, learners will be able to:

1. Understand core cloud computing principles and architectures
2. Build, deploy, and manage applications using leading cloud platforms
3. Automate infrastructure provisioning using Infrastructure-as-Code tools
4. Implement cloud security, monitoring, and cost-optimization best practices
5. Architect reliable, scalable, and resilient cloud environments
6. Prepare for industry-recognized certifications and cloud engineering roles

Audience:

1. Cloud Engineers seeking a structured, industry-aligned learning path
2. Software developers aiming to build cloud-native applications
3. Network engineers or system administrators upgrading to modern cloud operations

65



- 1 Cloud Fundamentals
- 2 Cloud Services
- 3 Cloud Solution Architecture
- 4 Infrastructure As Code
- 5 DevOps & DevSecOps
- 6 Advanced Security
- 7 Infrastructure Operations



University

Programmes & Specializations

1 CLOUD ENGINEERING.



TESA

Cloud
Engineering
Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced cloud engineers; Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Practical Labs:

Daily guided labs and assignments

Cloud infrastructure setup and management; Compute, storage, networking, and security labs; Automation and monitoring exercises; Troubleshooting and performance optimization.

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- *Architecture design, Deployment*
- *Security configuration*
- *Cost optimization*

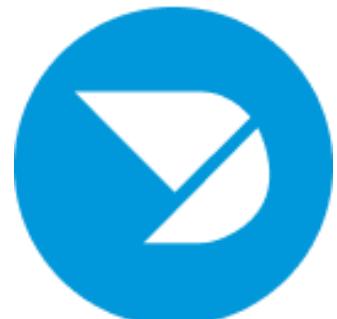
Industry-relevant use cases

Program Duration & Schedule:

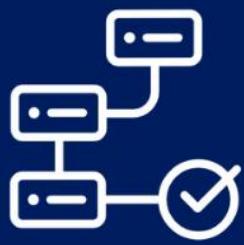
- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

Classes	Labs & Projects
10 Hours	10 Hours
40 Hours	40 Hours
20 Hours	20 Hours
10 Hours	10 Hours
10 Hours	10 Hours
20 Hours	20 Hours
40 Hours	40 Hours

66



66



SOLUTIONS ARCHITECTURE

CERTIFY IN SOLUTIONS ARCHITECTURE

3 SOLUTIONS ARCHITECTURE

- 1 Cloud Architecture Fundamentals
- 2 Design for Performance
- 3 Design for Security
- 4 Design for Cost Efficiency
- 5 Design for Operational Excellence
- 6 Design for Reliability

Cloud Architecture Fundamentals

Mastering core architecture principles, design patterns, well-architected frameworks, and trade-off analysis.

Design for Performance

Optimizing latency, throughput, scalability, caching, load balancing, and database performance strategies.

Design for Security

Implementing identity management, encryption, network security, compliance, and least-privilege access controls.

The Solutions Architecture Specialization equips learners with practical skills to design, evaluate, and implement scalable, secure, cost-effective, and reliable cloud-native solutions. It focuses on hands-on experience with multi-cloud platforms (AWS, Azure, Huawei, GCP), architecture patterns, and real-world projects to prepare learners for in-demand solutions architect roles.



Design for Cost Efficiency

Applying cost optimization techniques, right-sizing, reserved instances, tagging, and budgeting best practices.

Design for Operational Excellence

Building monitoring, logging, alerting, automation, CI/CD integration, and operational runbooks.

Design for Reliability

Achieving high availability, fault tolerance, disaster recovery, backups, and chaos engineering principles.

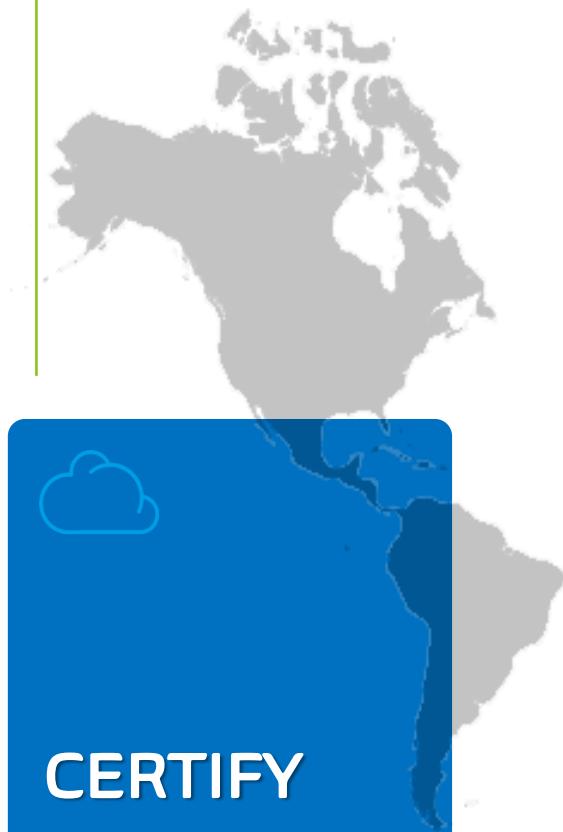
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Programmes & Specializations

2 SOLUTIONS ARCHITECTURE



CERTIFY Solution Architecture

- 1 Cloud Architecture Fundamentals
- 2 Design for Performance
- 3 Design for Security
- 4 Design for Cost Efficiency
- 5 Design for Operational Excellence
- 6 Design for Reliability

Specialization Goals:

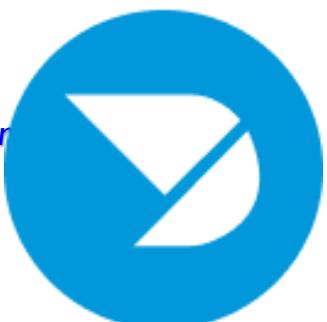
The Solutions Architecture Specialization is designed to equip learners with the technical breadth and hands-on experience required to architect scalable, resilient cloud solutions.

By the end of the program, learners will be able to:

1. *Apply architecture fundamentals and design patterns effectively*
2. *Design high-performance systems with optimal scalability and speed*
3. *Secure solutions using identity, encryption, and compliance best practices*
4. *Optimize costs through resource management and pricing models*
5. *Achieve operational excellence with monitoring and automation*
6. *Build highly reliable and fault-tolerant architectures*
7. *Prepare for industry-recognized solutions architect certifications*

Audience:

1. *Cloud practitioners seeking a structured path to solutions architecture*
2. *Developers or engineers aiming to design end-to-end systems⁶⁹*
3. *IT professionals upgrading to strategic cloud architecture roles*



Programmes & Specializations

1 SOLUTION ARCHITECTURE



CERTIFY

Solution
Architecture

Structure

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced solutions architects. Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Practical Labs:

Daily guided labs and assignments
Architecture diagramming, workload migration, performance tuning, security hardening, cost analysis, monitoring setup, and reliability testing exercises. Cloud infrastructure setup and management; Troubleshooting and performance optimization.

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- Architecture design, Deployment
- Security configuration
- Cost optimization

Industry-relevant use cases

Program Duration & Schedule:

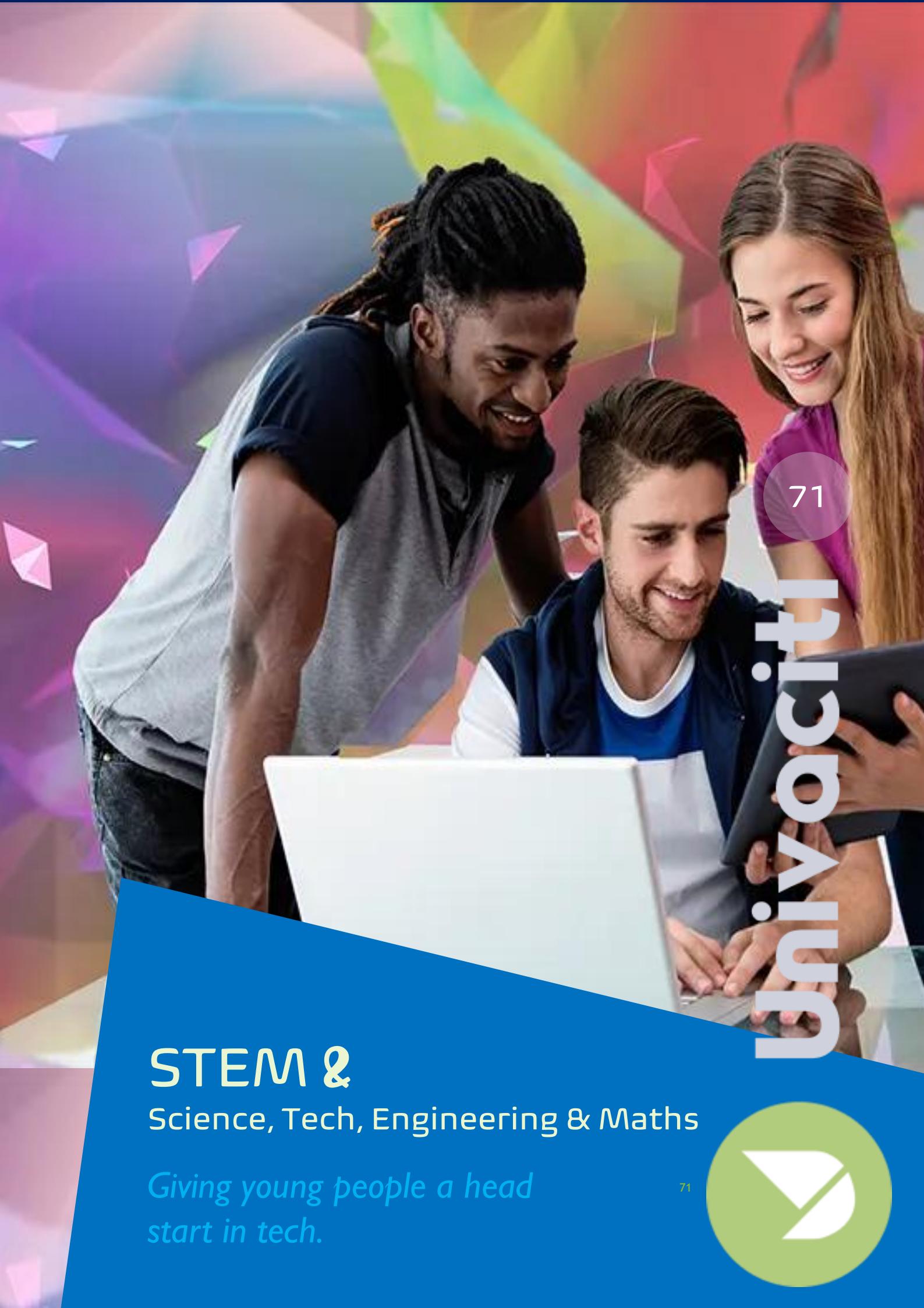
- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	Cloud Architecture Fundamentals	10 Hours	10 Hours
2	Design for Performance	40 Hours	40 Hours
3	Design for Security	20 Hours	20 Hours
4	Design for Cost Efficiency	10 Hours	10 Hours
5	Design for Operational Excellence	10 Hours	10 Hours
6	Design for Reliability	20 Hours	20 Hours

70





71

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STEM & Science, Tech, Engineering & Maths

*Giving young people a head
start in tech.*

71



Programmes & Specializations



STEM

Science, Tech,
Engineering & Maths

- 1 Cloud Engineering
- 2 Data Analysis & Analytics
- 3 Software Engineering - Java
- 4 Quality Assurance
- 5 Software Engineering - React
- 6 Artificial Intelligence & ML

What is TESA.

8-week intensive specialization courses, curated for top quality intakes,

TESA closes the tech talent gap by transforming passionate top 1% learners into world-class professionals who create real solutions for real problems.

Quality Internship & Practical Experience Opportunities.

Top quality internship and practical experience through various mission-critical customer projects.

Selection & Admission

There are 4 cohorts in a year, with intakes in January, March, July and September. There are two rounds of proctored assessment in Numeracy and basic computing skills, and an interview.

Job Opportunity

We connect students to employers, currently TESA has near 100% employment within 3 months of course completion.

Fee

\$2,000 (With Qucoon-provided scholarship of 70%). 100% Scholarship opportunity exists.

72

University





CLOUD ENGINEERING & Solutions Architecture

STEM &

Specializations:

1 CLOUD ENGINEERING.

1 Cloud Fundamentals

2 Cloud Services

3 Cloud Solution Architecture

4 Infrastructure As Code

5 DevOps & DevSecOps

6 Advanced Security

7 Infrastructure Operations

The Cloud Engineering Specialization equips learners with practical skills to design, deploy, secure, and manage scalable cloud infrastructure. It focuses on hands-on experience with cloud services (AWS, Azure, Huawei, GCP), automation, DevOps practices, and real-world projects to prepare learners for in-demand cloud engineering roles.



74

Cloud Services:

Understanding and using compute, storage, networking, and managed services across cloud platforms.

Solution Architecture:

Designing scalable, resilient, and cost-effective cloud solutions aligned with business requirements.

Security:

Implementing identity management, access controls, encryption, and compliance best practices in the cloud.

Automation:

Using scripts and Infrastructure as Code tools to provision and manage cloud resources efficiently.

InOps:

(Infrastructure Operations): Managing, monitoring, scaling, and maintaining reliable cloud infrastructure in production environments.

DevOps Practices:

Applying CI/CD pipelines, containerization, and collaboration workflows to enable faster and reliable software delivery.



Programmes & Specializations

1 CLOUD ENGINEERING.

Specialization Goals:

The Cloud Engineering Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable cloud infrastructures. By the end of the program, learners will be able to:

1. Understand core cloud computing principles and architectures
2. Build, deploy, and manage applications using leading cloud platforms
3. Automate infrastructure provisioning using Infrastructure-as-Code tools
4. Implement cloud security, monitoring, and cost-optimization best practices
5. Architect reliable, scalable, and resilient cloud environments
6. Prepare for industry-recognized certifications and cloud engineering roles

Audience:

1. Cloud Engineers seeking a structured, industry-aligned learning path
2. Software developers aiming to build cloud-native applications
3. Network engineers or system administrators upgrading to modern cloud operations



- 1 Cloud Fundamentals
- 2 Cloud Services
- 3 Cloud Solution Architecture
- 4 Infrastructure As Code
- 5 DevOps & DevSecOps
- 6 Advanced Security
- 7 Infrastructure Operations

75



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Programmes & Specializations

1 CLOUD ENGINEERING.



STEM

Cloud
Engineering
Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced cloud engineers; Real-time, automated demonstrations and guided practice.

Cloud Platforms Covered:

Hands-on labs on minimum two Cloud Service Providers, such as: Amazon Web Services (AWS), Microsoft Azure, Huawei Cloud. Cross-cloud exposure to prepare learners for multi-cloud environments.

Practical Labs:

Daily guided labs and assignments

Cloud infrastructure setup and management; Compute, storage, networking, and security labs; Automation and monitoring exercises; Troubleshooting and performance optimization.

Internship & Live Projects

Real-world cloud implementation scenarios.

End-to-end execution:

- *Architecture design, Deployment*
- *Security configuration*
- *Cost optimization*

Industry-relevant use cases

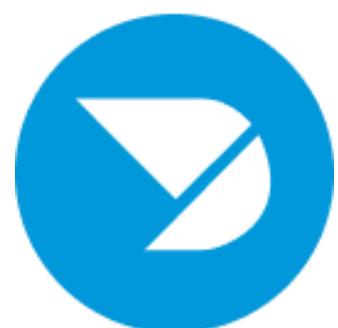
Program Duration & Schedule:

- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

Classes	Labs & Projects
10 Hours	10 Hours
40 Hours	40 Hours
20 Hours	20 Hours
10 Hours	10 Hours
10 Hours	10 Hours
20 Hours	20 Hours
40 Hours	40 Hours

76

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DATA ANALYTICS & Design Thinking

STEM & Specializations:

2 DATA ANALYTICS

1 Data Analysis Process

2 Problem Solving & Design

3 Analytics Techniques

4 Domain Expertise

5 Data Analysis Tools

6 Machine Learning Basics

7 Data Storytelling

Data Analysis Process:

Understanding and using the end-to-end data process: data collection, cleaning, exploration, analysis, and insight generation across various sources and formats.

Problem Solving & Design Thinking:

Implementing design thinking, problem framing, hypothesis testing, and structured approaches to analytics projects.

Analytics Techniques:

Mastering descriptive, diagnostic, predictive, and prescriptive analytics; statistical methods, correlations, and trend analysis.

The **Data Analytics Specialization** equips learners with practical skills to collect, clean, analyze, visualize, and communicate data-driven insights. It focuses on hands-on experience with tools like Excel, SQL, Python, Tableau/Power BI, and real-world projects to prepare learners for in-demand data analytics roles.

78

Domain Expertise:

Designing domain-specific solutions aligned with business requirements in areas like finance, marketing, operations, and healthcare.

Data Analysis Tools:

Using Excel, SQL, Python (Pandas, NumPy), and BI tools to provision, query, and transform data efficiently.

ML Basics:

Applying supervised and unsupervised learning, regression, classification, clustering, and model evaluation.

Data Storytelling:

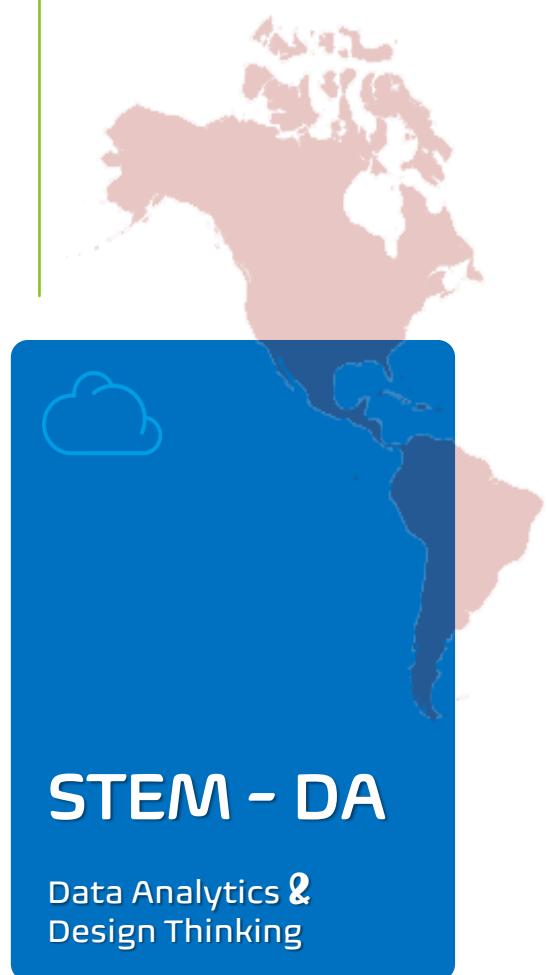
Using visuals and narratives to communicate insights, build dashboards, and drive decision-making.

78



Programmes & Specializations

2 DATA ANALYTICS



Specialization Goals:

The Data Analytics Specialization is designed to equip learners with the technical breadth and hands-on experience required to design, deploy, and manage scalable data solutions. By the end of the program, learners will be able to:

1. Execute the complete data analysis process from collection to insights
2. Apply problem-solving and design thinking to real business challenges
3. Use advanced analytics techniques for pattern discovery
4. Build domain-specific, scalable analytics solutions
5. Master industry tools for data manipulation and visualization
6. Implement and evaluate basic machine learning models
7. Create compelling data stories and dashboards
8. Prepare for industry-recognized certifications and data analytics roles

Audience:

1. Aspiring data analysts seeking a structured, industry-aligned learning path
2. Professionals transitioning to data-driven roles
3. Graduates or business users 79 upgrading to analytics practices

13

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Programmes & Specializations

1 DATA ANALYTICS



STEM

Data Analytics Structure.

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced data analysts. Real-time demonstrations and guided practice.

Tools & Platforms Covered:

Applied coursework covering Excel, SQL, Python, Tableau, and Power BI, with additional focus on data preparation, querying, automation, and visual storytelling within real-world analytics use cases.

Practical Labs:

Daily guided labs and assignments

Data collection & cleaning, querying & exploration, statistical analysis, modeling, visualization labs; Insight generation and optimization exercises.

Internship & Live Projects

Real-world analytics scenarios. End-to-end execution:

- *Problem framing & data preparation*
- *Analysis & modeling*
- *Visualization & storytelling*

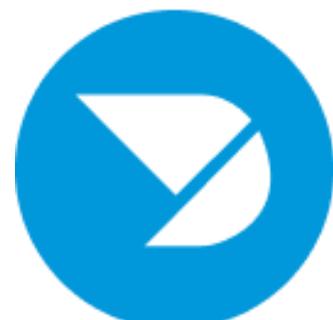
Industry-relevant use cases

Program Duration & Schedule:

- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

Classes	Labs & Projects
10 Hours	10 Hours
40 Hours	40 Hours
20 Hours	20 Hours
10 Hours	10 Hours
10 Hours	10 Hours
20 Hours	20 Hours
40 Hours	40 Hours

80



80



SOFTWARE ENGINEERING

(Java)

STEM &

Specializations:

3 SOFTWARE ENGINEERING (JAVA)

1 Java Fundamentals

2 Object-Oriented Programming

3 Three-Tier Java Application

4 Enterprise Frameworks

5 Software Architecture

6 DevOps Practices

7 Solutions Architecture

Java Fundamentals

Mastering core Java syntax, data types, control structures, collections, exception handling, and functional programming features.

Three-Tier Java Application

Building layered applications with presentation (frontend), business logic, and data persistence tiers using modern Java technologies.

Object-Oriented Programming

Applying OOP principles like encapsulation, inheritance, polymorphism, abstraction, interfaces, and design patterns in Java.

The Software Engineering (Java) Specialization equips learners with practical skills to design, build, test, deploy, and maintain enterprise-grade Java applications. It focuses on hands-on experience with modern Java ecosystems, frameworks, tools, and real-world projects to prepare learners for in-demand Java developer and software engineering roles.

82

DevOps Practices

Implementing CI/CD pipelines, containerization with Docker, automated testing, and deployment strategies for Java applications.

Software Architecture

Designing clean, and scalable system architectures using patterns like MVC, microservices, and layered architecture.

Solutions Architecture

Architecting end-to-end Java-based solutions that integrate databases, caching, and cloud deployment.

Enterprise Frameworks

Mastering Spring Boot, Spring MVC, Spring Data JPA, Hibernate, REST APIs, security, and microservices development.



Programmes & Specializations

2 JAVA

Specialization Goals:

The Software Engineering (Java) Specialization is designed to equip learners with the technical depth and hands-on experience required to build robust, scalable enterprise applications.

By the end of the program, learners will be able to:

1. Write efficient code using modern Java features.
2. Apply object-oriented principles and design patterns effectively
3. Build RESTful services and microservices using Spring Boot ecosystem
4. Design maintainable and scalable software architectures
5. Implement DevOps pipelines for automated build, test, and deployment
6. Architect Java solutions for real-world business problems
7. Prepare for industry-recognized certifications and Java engineering roles

STEM - SE
Software
Engineering
(Java)

1 Java Fundamentals

2 Object-Oriented Programming

3 Three-Tier Java Application

4 Enterprise Frameworks

5 Software Architecture

6 DevOps Practices

7 Solutions Architecture

Audience:

1. Aspiring Java developers seeking a structured, industry-aligned learning path
2. Programmers transitioning to enterprise Java development
3. Graduates or IT professionals upgrading to modern backend engineering

83



Programmes & Specializations

1 JAVA



STEM
Software
Engineering
(Java)

Structure

Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced Java engineers; Real-time, automated demonstrations and guided practice.

Tools & Platforms Covered:

Hands-on with Java SE/EE, Spring Boot, Maven/Gradle, Git, Docker, PostgreSQL/MySQL, Postman, IntelliJ IDEA/Eclipse. Exposure to cloud platforms for deployment.

Practical Labs:

Daily guided labs and assignments Core Java exercises, API development, database integration, testing, containerization, and deployment labs; Performance and security optimization.

Internship & Live Projects

Real-world Java development scenarios. End-to-end execution:

- Requirements analysis & design
- Full-stack implementation
- Testing & deployment

Industry-relevant use cases

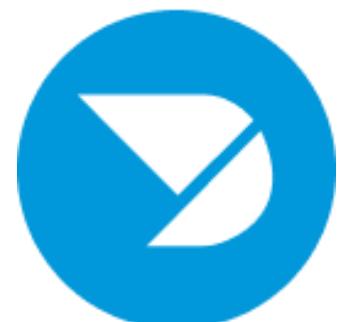
Program Duration & Schedule:

- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

Classes Labs & Projects

1	Java Fundamentals	20 Hours	20 Hours
2	Object-Oriented Programming	20 Hours	20 Hours
3	Three-Tier Java Application	25 Hours	25 Hours
4	Enterprise Frameworks	35 Hours	35 Hours
5	Software Architecture	20 Hours	20 Hours
6	DevOps Practices	20 Hours	20 Hours
7	Solutions Architecture	30 Hours	30 Hours

84





SOFTWARE QUALITY ASSURANCE

STEM &

Specializations:

3 SOFTWARE QUALITY ASSURANCE

1 Quality Assurance Fundamentals

2 Software Testing (Functional and Performance)

3 Testing Tools

4 API Testing - Functional & Security

5 Test Automation Strategy

6 DevOps and CI/CD Integration

7 Solutions Architecture

Quality Assurance Fundamentals

Core QA principles, SDLC, testing types and levels, defect management, and quality metrics.

Software Testing (Functional & Performance)

Manual and exploratory testing, test case design, functional testing, regression, and performance, load, and stress testing.

Testing Tools

Hands-on use of automation frameworks for functional testing (Selenium, Cypress) and performance testing (JMeter, Gatling).

The Software Quality Assurance Specialization equips learners with practical skills to design, execute, and automate tests that ensure high-quality, reliable software delivery. It focuses on hands-on experience with modern testing tools, frameworks, and real-world projects to prepare learners for in-demand QA engineering and SDET roles.

86

API Testing

Functional, security, and performance testing of REST and SOAP APIs using Postman and RestAssured.

Test Automation Strategy

Designing maintainable automation frameworks, data-driven testing, cross-browser testing, and test suite maintenance.

DevOps & CI/CD Integration

CI/CD test integration using Jenkins, GitHub Actions, and Docker.

Solutions Architecture (QA Perspective)

End-to-end test strategies and quality gates for microservices and cloud-native systems.



Programmes & Specializations

1 SOFTWARE QUALITY ASSURANCE



Specialization Goals:

The Software Quality Assurance Specialization is designed to equip learners with the technical breadth and hands-on experience required to deliver high-quality software at scale.

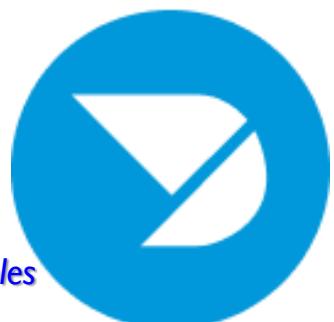
By the end of the program, learners will be able to:

87

1. Apply core QA principles and testing methodologies effectively
2. Design and execute functional and performance test scenarios
3. Automate tests using industry-standard tools and frameworks
4. Validate APIs for functionality, security, and reliability
5. Build maintainable and scalable automation strategies
6. Integrate testing seamlessly into DevOps pipelines
7. Architect comprehensive quality assurance solutions
8. Prepare for industry-recognized certifications and QA/SDET roles

Audience:

1. Aspiring QA engineers and SDETs seeking a structured, industry-aligned learning path
2. Manual testers aiming to transition to automation and modern practices
3. Developers or IT professionals upgrading to quality-focused roles



1 Quality Assurance Fundamentals

2 Software Testing

3 Testing Tools

4 API Testing

5 Test Automation Strategy

6 DevOps and CI/CD Integration

7 Solutions Architecture

Programmes & Specializations

1 QUALITY ASSURANCE



Training Mode:

Instructor-Led Online Classes

Live interactive sessions with experienced QA engineers; Real-time, automated demonstrations and guided practice.

Tools & Platforms Covered:

Hands-on with Selenium, Cypress, Appium, JMeter, Postman, RestAssured, Jenkins, Git, Docker, JUnit/TestNG. Exposure to cloud-based testing environments.

Practical Labs:

Daily guided labs and assignments

Test case writing, manual execution, automation scripting, API validation, performance scripting, pipeline integration, and defect reporting exercises.

Internship & Live Projects

Real-world QA implementation scenarios. End-to-end execution:

- *Test planning & strategy*
 - *Automation framework development*
 - *Execution & reporting*
- Industry-relevant use cases*

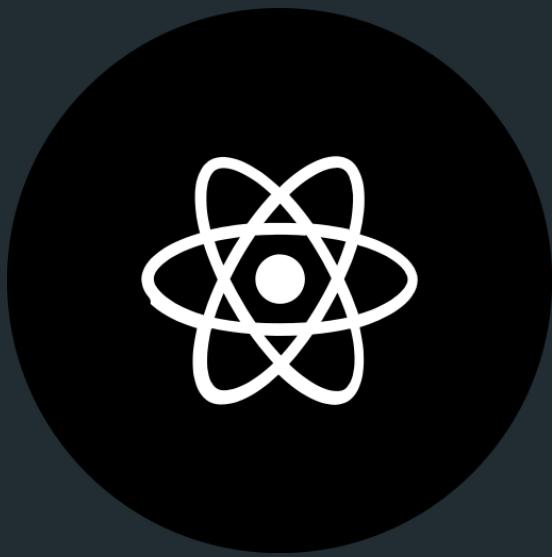
Program Duration & Schedule:

- *Duration: 8 Weeks*
- *Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.*

Classes Labs & Projects

1	Quality Assurance Fundamentals	15 Hours	15 Hours
2	Software Testing	25 Hours	25 Hours
3	Testing Tools	30 Hours	30 Hours
4	API Testing	25 Hours	25 Hours
5	Test Automation Strategy	25 Hours	25 Hours
6	DevOps and CI/CD Integration	20 Hours	20 Hours
7	Solutions Architecture	20 Hours	20 Hours





SOFTWARE ENGINEERING (REACT)

STEM &

Specializations:

3 SOFTWARE ENGINEERING (REACT)

1 React Fundamentals

2 Hooks & State Management

3 Component Architecture & Design

4 Routing & Navigation

5 Data Handling & Fetching

6 Advanced Concepts(Performance)

7 DevOps and Testing

React Fundamentals:

Introduces core React concepts including JSX, components, props, and rendering, enabling learners to build dynamic and reusable UI.

React Hooks & State Management:

Covers hooks, local and global state management, side effects, and data flow patterns to manage complex application.

Component Architecture:

Explores components structure & reusable design patterns for building clean apps.

The React Software Engineering Specialization equips learners with the practical skills required to build scalable, high-performance, and maintainable modern web applications using React. The course focuses on real-world component design, state management, and performance optimization making it a must-attend program for developers aiming to master professional frontend engineering.

90

Routing & Navigation:

Teaches client-side routing, navigation strategies, and layout management for building multi-page and single-page applications.

Data Handling/Fetching:

Focuses on managing API-driven state, handling asynchronous data, and authentication flows.

Advanced Concepts:

Covers rendering optimization, memoization, code splitting, lazy loading, and advanced React techniques.

DevOps and Testing:

Introduces testing strategies, CI/CD workflows, and deployment pipelines.



Programmes & Specializations

2 REACT



- 1 React Fundamentals
- 2 Hooks & State Management
- 3 Component Architecture & Design
- 4 Routing & Navigation
- 5 Data Handling & Fetching
- 6 Advanced Concepts(Performance)
- 7 DevOps and Testing

Specialization Goals:

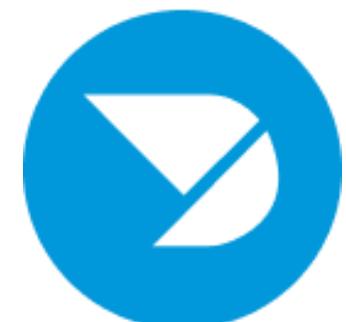
This Specialization is designed to take learners from foundational React knowledge to building production-ready applications using industry-standard workflows and best practices..

By the end of the program, learners will be able to:

1. Build scalable and reusable React applications
2. Manage application state using modern React patterns
3. Design clean component architectures and UI systems
4. Integrate and manage APIs and backend services
5. Optimize performance for real-world production use
6. Test, deploy, and maintain React applications confidently

Audience:

1. Frontend developers seeking to master modern React development
2. Software engineers building full-stack or frontend-heavy applications
3. Beginners with JavaScript knowledge aiming to transition into frontend development



Programmes & Specializations

1 REACT



STEM Software Engineering (React)

Structure

	Classes	Labs & Projects
1 React Fundamentals	10 Hours	10 Hours
2 Hooks & State Management	40 Hours	40 Hours
3 Component Architecture	20 Hours	20 Hours
4 Routing & Navigation	10 Hours	10 Hours
5 Data Handling & Fetching	10 Hours	10 Hours
6 Advanced Concepts	20 Hours	20 Hours
7 DevOps and Testing	40 Hours	40 Hours

Training Mode:

Instructor-led online classes Live interactive coding sessions Guided hands-on labs and exercises Project-based learning and peer collaboration

Cloud Platforms Covered:

Learners will work with React, modern JavaScript (ES6+), Node.js tooling, package managers, routing libraries, state management solutions, testing frameworks, CI/CD tools, and cloud deployment platforms.

Practical Labs:

Hands-on labs will involve building reusable components, implementing routing and state management, integrating APIs, optimizing performance, and deploying React applications using modern DevOps workflows.

Internship & Live Projects

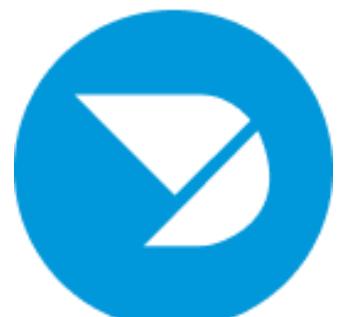
Learners will complete real-world frontend projects involving full application builds, API integration, performance optimization, testing, and deployment, simulating professional React development environments.

Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

92

University





ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

STEM & Specializations:

3 AI & ML

1 AI & ML Fundamentals

2 Python for ML

3 Deep Learning

4 Machine Learning Models

5 Generative AI

6 Agentic AI

7 AI Solutions Architecture

AI & ML Fundamentals

Introduces core AI & ML concepts, types of learning and essential tools, enabling learners to understand where and how AI creates value across real-world applications.

Python for ML:

Covers Python programming for data manipulation, modeling, and experimentation using industry-standard libraries.

ML Models:

Explores learning models, model evaluation, feature engineering, and optimization techniques for solving real-world prediction and classification problems.

The AI & ML Specialization equips learners with the foundational knowledge and hands-on skills required to build, deploy, and scale intelligent systems using modern AI and machine learning techniques. The program focuses on practical implementation, real-world use cases, and emerging AI paradigms such as Generative and Agentic AI, making it an essential course for anyone looking to stay relevant in the AI-driven future.

94

Deep Learning:

Focuses on neural networks, deep learning architectures, and training techniques used to build pattern recognition models.

Generative AI:

Examines generative models such as LLMs and diffusion systems for building text/image generation AI.

Agentic AI:

Introduces autonomous and multi-agent AI systems, covering decision-making, planning, tool usage, and orchestration.

Data Storytelling:

Covers AI system design, including data pipelines, model deployment, scalability, monitoring & integration.



Programmes & Specializations

2 AI & ML



1 AI & ML Fundamentals

2 Python for ML

3 Deep Learning

4 Machine Learning Models

5 Generative AI

6 Agentic AI

7 AI Solutions Architecture

Specialization Goals:

The AI & ML Specialization is designed to progressively move learners from foundational understanding to advanced, production-ready AI systems through hands-on projects and real-world architectures.

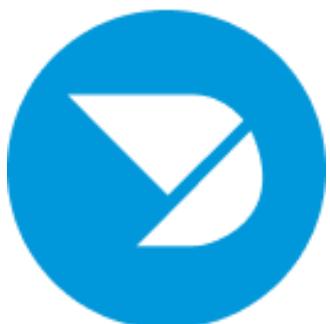
By the end of the program, learners will be able to:

1. Understand and apply core AI and machine learning concepts
2. Build and evaluate machine learning and deep learning models
3. Develop generative AI and agent-based systems for real-world use cases
4. Design scalable AI solutions and deployment architectures
5. Integrate AI models into applications and business workflows
6. Prepare for AI engineering, ML engineering, and applied AI roles

Audience:

1. Software developers and engineers transitioning into AI and machine learning roles
2. Data analysts and technical professionals seeking applied AI skills
3. Product builders and innovators looking to embed AI into real-world solutions

95



University

Programmes & Specializations

1 AI & ML



Training Mode:

Instructor-led online classes Live interactive sessions with AI practitioners Hands-on coding demonstrations and guided exercises Project-based learning and collaborative problem-solving.

Tools & Platforms Covered:

Learners will work with modern AI and ML tools and platforms including Python, NumPy, Pandas, Scikit-learn, TensorFlow or PyTorch, Jupyter Notebooks, generative AI frameworks, agent orchestration tools, and cloud-based AI services for deployment and scalability..

Practical Labs:

Hands-on labs will guide learners through building ML models, training deep learning networks, creating generative AI apps, and developing autonomous agents, with labs covering the whole model lifecycle.

Internship & Live Projects

Industry-relevant AI projects with real datasets and real-world problem statements, covering:

- Model development and deployment.
- AI solution architecture.
- End-to-End AI implementation.

Program Duration & Schedule:

- Duration: 8 Weeks
- Training Hours: 8 Hours per Day, Monday to Saturday, Intensive full-time.

Classes Labs & Projects

1	AI & ML Fundamentals	10 Hours	10 Hours
2	Python for ML	40 Hours	40 Hours
3	Deep Learning	20 Hours	20 Hours
4	ML Models	10 Hours	10 Hours
5	Generative AI	10 Hours	10 Hours
6	Agentic AI	20 Hours	20 Hours
7	AI Solutions Architecture	40 Hours	40 Hours

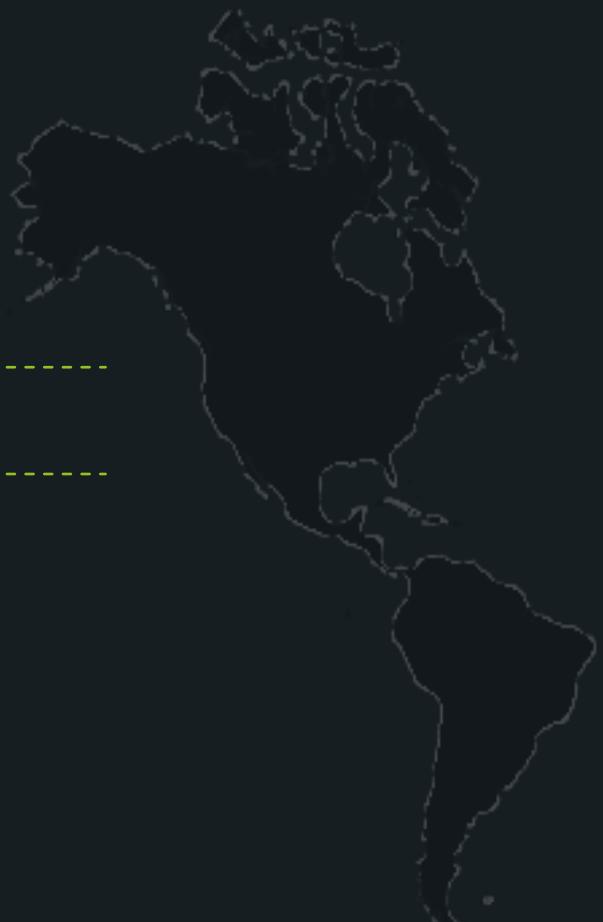


CONTACT

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Location & Growth Strategy.

Geographic expansion for Univaciti.

- | | | |
|---|--------------------------------|---|
| 1 | Nigeria | ✓ |
| 2 | Kenya | ✓ |
| 3 | United Arab Emirates - UAE | ✓ |
| 4 | United States of America - USA | ✓ |

